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**Secondary education expansion in Tanzania:
Policy and practice implications for teachers' sense of
efficacy**

A thesis

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ABSTRACT

Since the introduction of Tanzania's secondary education expansion policy in 2004 student performance has declined significantly. This trend led me to hypothesise that there may have been a decline in teacher efficacy. The present study investigated the influence of the policy and its implementation on teachers' self-efficacy beliefs, because these beliefs impact on the quality of teaching. The study used a mixed-method approach, with a focus on case studies. Interviews, questionnaires and documentary reviews were used for gathering data. Ninety-nine secondary school teachers from four schools in the Iringa region of Tanzania participated in this research. Social cognitive theory was employed as a conceptual framework for the project. While inductive procedures were used for analysing the interview data, the questionnaire data were analysed via the Statistical Package for Social Sciences Software (SPSS) before being tabulated and graphed.

Findings indicated that strategies intended to ensure the successful enactment of the expansion policy were not fully implemented nor targets met. In a number of ways this adversely affected the ability of teachers to go about their work and, consequently, educational outcomes for students. Overall, evidence from this study suggests that the manner in which the expansion policy was enacted and implemented contributed to the erosion of teacher professional identity and social standing, particularly in relation to self-efficacy. This produced further vicious cycles of effects and consequences. Factors associated with school staffing, school infrastructures, resources for teaching, relationships with the community and poor academic standards of enrolled students emerged as central contributors to this negative situation. An analysis of quantitative data strongly suggested that the expansion policy was implemented poorly, which was detrimental to teacher efficacy and, ironically, undermined the policy itself.

This research adds to a growing body of literature on the sources of teachers' self-efficacy. Firstly, the study identifies evidence which indicates that social persuasion is one of the most important contributors to social self-efficacy. It also identifies factors which reinforce a view of mastery experiences as the most influential source of self-efficacy. Secondly, the study points out the causes of teachers' negative emotional states, including factors outside of the school environment. Thirdly, the

study found that certain factors which were emphasized by Bandura as having impact on only one specific source of self-efficacy actually have an impact on more than one source of self-efficacy.

Analysis of the research findings generated three major policy recommendations for helping teachers develop self-efficacy: promoting professional learning; empowering parents and education authority figures; and improving teaching and learning environments. The study also indicates areas for further research in factors related to teacher efficacy in Tanzania. These include: teaching practices in new schools created under the policy; the extent to which the curricula of university teacher education courses influence self-efficacy in professional practice; and how the policy impacts upon the self-efficacy of students as learners.

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CHAPTER 1: INTRODUCTION

1.1. My background and the importance of this research to me

This research topic, “Secondary education expansion in Tanzania: Policy and practice implications for teacher efficacy” emerged as a result of my experience as a secondary school teacher in Tanzania. After secondary school, I enrolled in a teachers college and a University to undertake a teaching diploma and a bachelor’s degree in education respectively. After successful completion of my studies at these institutions, I considered myself to be competent because I had a good educational background and I was well trained in my subject areas of specialisation, namely History and Geography. In 2001, the Ministry of Education posted me to teach at a girls’ secondary schools located in the central part of Tanzania. However, during my teaching duties, especially after the government initiated the rapid expansion of secondary education in 2004, I noticed a trend towards teachers who had no teaching qualifications and inadequate training entering the teaching field. This concerned me because I believe that teaching should be primarily about good quality learning for students. In my experience, high-quality teaching demands highly qualified teachers who are pedagogically well prepared to deliver relevant, content-based knowledge and skills. More particularly, when a teacher is highly qualified, and is pedagogically well prepared, she or he has a strong sense of self-belief (efficacy) around delivering relevant content-based knowledge and skills in a variety of ways. In this way, not only can more students understand and learn but the learning is at a higher level.

As an experienced and qualified teacher, I understand that great teaching consists of more than just mastery of knowledge and skills. It is also fashioned by such qualities as the spirit, values, and personality governing the teaching profession. Because teachers with no teaching qualifications and little preparation were not aware of the moral principles required for teaching, they did not appear to behave as ethical professionals. I witnessed that these teachers lacked a commitment to teach and were not regularly attending school. I felt terrible, as students who were taught by these unqualified teachers always complained to the head of school about not receiving quality teaching and wanted to be assigned more professional and responsible teachers in their respective subjects.

Similarly, during my pre-service teacher education, I believed that novice teachers might improve their competencies as they became exposed to various in-service professional development programmes. Upon my first appointment at a secondary school, however, I was aware of my experienced colleagues complaining about a lack of opportunities for on-the-job training. I also learnt that although a few science teachers took part in such training, when they came back to school they did not share the acquired knowledge with their fellow teachers who did not have such opportunities. This deeply saddened me because these teachers were struggling to teach certain topics in their subject areas. I was also amazed to observe a few long-serving teachers reluctant to upskill their qualifications from diploma to bachelor's degree since they already received higher salaries than their colleagues who had a bachelor's degree. This led me to question the professional integrity of these teachers, since I understand that learning is an ongoing process.

After teaching for at least seven years in secondary schools, I was promoted to a university as a teacher educator in the social sciences curriculum area. This exposed me to new experiences in relation to teaching and understanding the quality of pre-service teachers and teaching education. For example, before the adoption of the expansion plan, prospective student teachers, including myself, were enrolled in teacher colleges and higher education institutions after having achieved high grades in our secondary education schooling. However, during the implementation of the expansion policy, I witnessed my university enrolling many pre-service teachers with low grades in their subject areas. This raised concerns for me as I did not expect that teachers with such poor academic backgrounds would be able to help students become competent in the subjects they taught.

At university, I was also surprised at the size of classes the teacher educators had to teach, particularly in compulsory courses such as Philosophy of Education and Psychology of Education. Some teacher educators taught more than 400 student teachers per class. This made me reflect on my pre-service courses when the class numbers were low compared to those at my current university. As a result, I was worried that apart from exacerbating the stress of teacher educators, the large class size might be a stumbling block for these educators to apply proper methods in preparing these novices to be competent professional teachers.

My concern with the quality of secondary teaching in Tanzania led me to examine whether the government's rapid secondary education expansion policy allowed for the provision of adequate professional support and preparation for teachers to become effective. I was particularly interested in the efficacy beliefs of these teachers because these beliefs shape the quality of teaching.

1.2. The Tanzanian context

The United Republic of Tanzania is a union of two independent countries, Tanganyika and Zanzibar. "Tan" represents Tanganyika and "Zan" is for Zanzibar. Officially, the union of the two territories took place in 1964. Before the First World War Tanganyika was under German control. After the First World War, the country came under British domination (Illiffe, 1969). For many previous centuries, Zanzibar was the territory of the Sultanate of Oman. In 1890, however, the country came under British colonial authority, and the Sultan was granted the authority to rule Zanzibar on behalf of the British (Roberts, 1990). Tanganyika and Zanzibar finally obtained their independence in 1961 and 1963 respectively. Prior to colonisation, the people of Tanganyika and Zanzibar were trading partners (Pawlikova-Vilhanova, 2010). This shared history in relation to colonialism and trade was among the factors shaping the union of the two countries (Devine, 1973; Sanders, 2014).

1.2.1. The physical environment and language

Geographically, Tanzania is bordered by Kenya and Uganda in the North, Rwanda, Burundi and the Democratic Republic of Congo in the West, Zambia, Malawi and Mozambique in the South, and the Indian Ocean in the East. Most government ministry offices, the president's offices and the National Assembly are located in Dodoma, which is the official capital city of Tanzania. Dar es Salaam is the largest city and leading commercial centre in the country.

Tanzania is endowed with diverse natural resources. These include Lake Victoria (the second largest fresh water lake in the world and the world's largest freshwater fishery), Lake Tanganyika (the second deepest lake in the world) and Lake Nyasa (the eighth largest lake in the world). Mount Kilimanjaro (the highest mountain in Africa and the second highest mountain in the world) is also located in Tanzania. The country has national parks and game reserves offering a wide variety of

wildlife, though these are not utilized optimally in economic, educational and cultural terms.

Tanzania has more than 120 tribes and each tribe has its own language (Malipula, 2014; Miguel, 2004). Despite these diverse vernaculars, most people in Tanzania speak Kiswahili, which is the national language. English is used only in high courts, foreign trade and diplomacy, and secondary and higher education. The dominance of Kiswahili, which essentially draws most of its vocabulary from Arabic, was mainly brought about as a result of colonisation (Brock-Utne, Desai, Qorro, & Pitman, 2010; Ngonyani, 1995). During the colonisation of Tanganyika, the German colonial government placed little emphasis on the usage or teaching of foreign languages, including German (Swilla, 2009). Instead, Kiswahili was encouraged as a medium of instruction in both local administration and schools because the Germans found that Kiswahili was already spoken by the majority of people (Babaci-Wilhite, 2013; Gran, 2007; Tibategeza & Plessis, 2012). The British colonial administration maintained Kiswahili as the language of instruction in the first five years of primary education, but in the last three years of primary and in all secondary education English was adopted for purposes of instruction.

1.2.2. Economic status and population

Most Tanzanians live in rural areas and depend on agriculture as the main economic activity. Notwithstanding the importance of the agricultural sector to rural livelihoods, its economic contribution is very low (The United Republic of Tanzania, 2001, 2013), because agriculture is highly reliant on rainfall, which in Tanzania is usually limited and unreliable. As a result, many rural communities suffer from food insecurity and hunger. Although recent international economic documents (The International Monetary Fund, 2016; The World Bank, 2012) show that the Tanzanian Gross Domestic Product (GDP) is one of the fastest growing in Sub-Saharan Africa, the positive impact of this growth for most of the population has yet to be realised. Most people, especially in rural areas, still live below the poverty line (Osorio, Percic, & Battista, 2014; Sigalla, 2014). The economic disparity between social groups, I can surmise, is likely to have far-reaching detrimental implications for community participation in the implementation of various government-initiated plans.

According to the 2012 national census, the population of Tanzania was around 45 million compared to 34 million in 2002 (National Bureau of Statistics, 2013; The United Republic of Tanzania, 2014). This population growth has implications for the government in terms of expanding and improving their social services, and education in particular. The data show that between 2002 and 2012 primary school enrolment rates increased from 69 percent to 77 percent (Agwanda & Amani, 2014; National Bureau of Statistics, 2013; The United Republic of Tanzania, 2014). This enrolment expansion can be related to the government's determination to enact its primary education development programme, which is intended to ensure that all school-age children are enrolled (The United Republic of Tanzania, 2002). The adoption of this policy, as will be discussed, has ramifications for other levels of the education system.

1.3. Secondary schooling in Tanzania

In Tanzania, secondary education is offered to students after completion of the compulsory seven years of primary schooling (Ministry of Education and Culture, 1995). Tanzania has two categories of secondary schools: government schools and private schools. Government secondary schools are further divided into two sub-categories: public and community-owned secondary schools. Public secondary schools are schools built by direct funding from the government. Community schools, on the other hand, are built through the shared efforts of government and community. Currently, there are 89 public secondary schools and 3439 community secondary schools (Ministry of Education and Vocational Training, 2014).

This secondary education experience provides the student with two sequential blocks of schooling. The first four years of the secondary education programme (i.e. forms one to four) provide the student with what is called the *ordinary* level of secondary education. The final two years of the secondary education programme (i.e. forms five and six) provide what is called the *advanced* level of secondary education (Ministry of Education and Vocational Training, 2011). From a teacher preparation perspective, the ordinary level of secondary education acts as an entry pathway to primary school teaching, while the advanced level acts as the entrance requirement for undertaking a teaching diploma at a teachers' college or an undergraduate degree in education at a university. According to the Tanzania

Education and Training Policy (TETP) of 1995, teachers with diploma qualifications from a recognised teachers' college are eligible to teach the first two years of secondary education (forms one and two) only, while teachers with a bachelor's degree or a master's qualification from a recognised university are eligible to teach all levels of secondary education (Ministry of Education and Culture, 1995). However, due to the shortage of graduate teachers it is common for teachers with only a diploma qualification to teach classes at higher levels of secondary education.

Unlike primary schooling, secondary schooling in Tanzania is not compulsory. Over the last two decades, the education budget allocated by the government has not enabled or allowed for its education goals to be accomplished. The secondary education budget, in particular, has been declining in favour of higher education (Ministry of Education and Vocational Training, 2008, 2010). For example, the budget for secondary education declined from 16% of the total education budget in 2007/2008 to 12% in both the 2008/2009 and 2009/2010 fiscal years. Since school operating costs are high, and the government is unable to cover all these costs, parents of students are charged school fees and expected to make other contributions in the form of cash donations and labour for the construction of school buildings.

It is, however, important to understand that public and community secondary schools in Tanzania are partly centralised. This is to say, teachers in these schools are employed by the government. For this reason school fees and contributions from parents are not used to pay teacher salaries; instead they are used to purchase teaching and learning resources (Ministry of Education and Culture, 1995; Ministry of Education and Vocational Training, 2010). It might be expected that, because the secondary education budget is insufficient, the quality of education delivery will be compromised if parents are unable to pay fees and other contributions. This situation will inevitably impact on teachers.

1.4. The secondary education expansion policy

Before independence, secondary schools in Tanzania were unevenly distributed as the colonial powers established the schools in productive areas where they themselves settled (Buchert, 1991; Mart, 2011; UNESCO, 1982). Most of these

schools were run by Christian missionaries, and to a large extent the Christians and other people in the regions in which these schools were located were the beneficiaries of this particular social service. Importantly, females had limited access to these schools by comparison with their male counterparts (Ricketts, 2013). The education offered by these missionaries was more oriented towards providing lower-rank personnel who could serve as teachers, messengers and secretaries.

Colonial education came to be regarded as inadequate because it was culturally alienating and exacerbated regional differences (Chaula, 2014; Frankema, 2012; Mtitu, 2014). Therefore, soon after independence in 1961 Tanzania adopted a socialistic ideology whose fundamental principles were: work by everyone and exploitation of none; fair sharing of resources and equality; and respect for human dignity (Nyerere, 1967). As a consequence of this ideology, the government nationalised all the religious and privately owned secondary schools. This was intended to ensure that all high-achieving, primary-school graduates, regardless of their socio-economic background, were educated in secondary schools of comparable quality (Chediel, Sekwao, & Kirumba, 2000; Mushi, 1991).

The implementation of a socialist ideology influenced various changes in the education system. The introduction of a philosophy of education for self-reliance (ESR) in 1967, the emphasis of which was on the integration of theory and practical competencies in teaching and learning, was the most notable change initiated in the curricula for training teachers (Nasongo & Musungu, 2009). In this regard, the purpose of secondary education was revised from the mere preparation of students for a higher level of schooling to the production of knowledgeable students who would be enthusiastic about serving the rural poor to improve their livelihoods. A deliberate effort was made by the government to recruit into the profession qualified and competent teachers to teach agricultural, commercial and technical specialty subjects. Oketch and Rolleston (2007), who examined policies on free primary and secondary education in East Africa, found that Tanzania under ESR focused its attention on the curriculum, but less attention was paid to the expansion of secondary education. Given the high number of primary-school leavers, there were not enough secondary schools; only students with outstanding performance were selected to join secondary schools.

Between the 1970s and 1980s Tanzania underwent a prolonged economic crisis. The crisis was intensified by drought, the global oil crisis, war between Tanzania and Uganda, the collapse of the former East Africa Community and the instability of coffee prices in the world market (Potts, 2005; Wobst, 2001). This situation left the country financially bankrupt, and thus unable to adequately support its secondary education system. Given these circumstances and the influence of donors – in particular the World Bank and the International Monetary Fund in the early 1990s – the country introduced and started to implement the idea of cost sharing. High-school fees, which were part and parcel of a cost-sharing approach, brought about educational disparities, because students from poor family backgrounds were unable to pay full fees, and this resulted in high dropout rates (Lewin, 2006). Moreover, some illiterate parents used cost-sharing to prevent their female children from attending secondary schools after being selected. These parents used their female children as a source of wealth by forcing them to get married so that they could get dowries (Temba, Warioba, & Msabila, 2013). This traditional belief is one of the factors which appeared to have contributed to a widening gap between males and females in the secondary education sector.

Tanzania, like other African countries, signed up to a number of international conventions geared towards addressing educational challenges which have their roots in the colonial and post-colonial education system. These conventions include the Beijing Declaration and Platform for Action of 1990, the Salamanca World Conference on Special Needs Education of 1994, and the World Education Forum (Dakar Framework for Action) of 2000 (Maclean, 2003; Okkolin, Lehtomäki, & Bhalalusesa, 2010; UNESCO, 2015; United Nations, 1995). All these conferences called for the elimination of gender disparities in secondary education by 2005, and the achievement of gender equality in education by 2015. Equality of secondary education opportunities for the most vulnerable and disadvantaged groups was also emphasised, and Tanzania promised to undertake this task. Because of these undertakings and other factors, such as the rapid increase of primary school enrolments in 2004, the government developed the secondary education expansion policy as part of its commitment to the implementation of these resolutions.

1.5. Policy enactment and implementation

The government's secondary education sector development programme focused on improving public schools and ensuring that each ward (two, three or four villages) had at least one community school. This programme was intended to increase access, to achieve equity in the provision of education, and to significantly improve the quality of education delivery (Ministry of Education and Culture, 2004; Okkolin et al., 2010). As a result of this programme, the enrolment capacity of the existing public schools was expanded and new community schools were built. Statistics show that the number of community schools rose by 194% between 2004 and 2008. Between 2004 and 2011 the enrolment rate increased by 418.05% (Ministry of Education and Vocational Training, 2007a, 2012). This rapid increase in enrolments, however, created problems in the provision of adequate numbers of teaching staff. For instance, while the enrolment of students rose by 22.2% in 2005, the supply of teachers rose by 14.4% only. Of more concern, though, when the enrolment numbers rose by 84.3% in 2007, the supply of teachers actually declined by 2.7%. Between 2005 and 2009 the number of secondary schools and enrolments increased by 135% and 178% respectively, while the number of teachers increased by only 81% (Ministry of Education and Vocational Training, 2010, 2011).

These figures suggest that the teacher-student ratio increased following the introduction of the secondary education expansion programme. My research hypothesised that this would have had implications for the professional confidence of teachers, especially in subject matter delivery. Studies show that large classes have a negative effect not only on student performance but also on the quality of student engagement (Blatchford, Bassett, & Goldenstein, 2003; Koca & Celika, 2015). When seeking teachers' opinions about the impact of class size on learning in Tanzanian schools, Sumra (2005) found that small class sizes were favoured by teachers because they increase effective student attention and allow interaction flexibility between teacher and students. In contrast, large classes were seen as making interaction between teachers and students less effective.

1.5.1. A system under stress

There is ample evidence that the implementation of the secondary education expansion policy has caused stress in the Tanzanian education system. At the same

time that Tanzanian secondary schools are experiencing a high enrolment rate there is a critical resource shortage (Ministry of Education and Culture, 2004; Ministry of Education and Vocational Training, 2010). There is evidence of inadequate teaching and learning materials, an insufficient number of school libraries, and a critical shortage of science laboratories and associated equipment (Ndalichako & Komba, 2014; Salema, 2015). A shortage of teaching and learning resources in schools means that, to large extent, students depend mainly on the professional knowledge and skills of their teachers. A shortage of science laboratories and specialist equipment suggests that teachers and students are not teaching and learning through experimentation. The inadequate provision of such resources can limit the capacity of teachers to integrate theory and practice, thereby adversely affecting student learning. This situation can, in turn, lead to poor student outcomes.

The Tanzania Education and Training Policy (TETP) of 1995 stipulates that a secondary school teacher shall be in possession of a valid diploma and degree in education from a recognised institution (Ministry of Education and Culture, 1995). However, the spike in secondary education enrolments prompted the government, through the Ministry of Education and Vocational Training (MoEVT), to embark on the recruitment of licensed teachers to cope with the situation. There are two categories of licensed teachers. The first category is that of the advanced-level, secondary school student graduate, who is given a four-week teacher training course before being sent to teach in a secondary school. The second category of licensed teacher is the para-professional who has graduated from a non-teaching degree but is then encouraged to become a teacher. These teachers, unlike those in the first category, are not subject to any pedagogical preparation that might enhance their professional knowledge and abilities (Anney, 2013; Lawrent, 2011; The United Republic of Tanzania, 2007). It can be argued that this initiative violates the Tanzania Education and Training Policy on the staffing of secondary schools.

Furthermore, the large increase in new community secondary schools may well be creating pressure on the formal school inspection system (Ministry of Education and Vocational Training, 2010). School inspectors in Tanzania serve to oversee the quality of teaching and learning in schools (Hakielimu, 2009; The United Republic of Tanzania, 2000). Although there has been an increase in the number of secondary schools inspected each year, most schools are still not being regularly inspected.

For instance, the number of schools inspected increased from 539 in 2005 to 1880 in 2008, yet this was still only 49.5 % of the total number of secondary schools in the country. This means that more than half of the existing secondary schools were not inspected. In the fiscal year of 2011/2012, 935 out of 2,160 targeted secondary schools (43.3%) were inspected. Likewise, in the fiscal year of 2013/2014, 2,308 out of 4,528 (50.9%) government and private secondary schools were inspected (Kawambwa, 2014; Ministry of Education and Vocational Training, 2010, 2012). These statistics indicate that the government is not only under-resourcing the inspectoral department but also failing to support the professional development of teachers in the area of subject matter delivery.

1.5.2. The status of teachers in the context of expansion

The Tanzania's secondary education expansion policy appears to focus on issues of access while ignoring issues related to effective teaching. This situation is inconsistent with the comprehensive Tanzania Education and Training Policy of 1995, from which most existing education programmes and plans originate. This policy clearly emphasises the need for owners and managers of secondary schools to provide working conditions for teachers which are conducive to a high standard of education (Ministry of Education and Culture, 1995). Despite this, the working environment for teachers in Tanzania appears to be beset with certain problems. A shortage of teachers' houses is common in community secondary schools (Jidamva, 2012; King, 2013). Some teachers share the few houses available in the school while others stay in poor housing outside the school environment. Also, most of these schools were built without teacher offices, so that teachers often lack a dedicated space to prepare their lessons. This is symptomatic of the way in which the government focus on improving access to secondary education has run the risk of overlooking the needs of teachers, who are actually delivering this education.

In spite of the importance of teacher appraisals in enhancing the quality of teaching and learning (Brinsden, 2011; Maharaj, 2014), the initial Ministry of Education and Culture (MoEC) curriculum document of 2004 seemed to pay little attention to performance and feedback for teachers. It concentrated instead on matters related to the expansion and improvement of entry qualifications for diploma and graduate teachers (Ministry of Education and Culture, 2004). The absence of a profession-based appraisal tool suggests that performance feedback for teachers was not a

priority. This situation is likely to have led to a lack of professional mentoring, that is, advice and guidance given to individual teachers by their more qualified and experienced colleagues.

Although a performance-oriented appraisal system was not emphasised in this Ministry document, in 2005 the government required its use for all public servants, and teachers in particular (Tidemand, Olsen, & Sola, 2008). Such a system was acknowledged to be a crucial tool in determining one's promotion, which was said to be possible only for teachers able to achieve goals agreed between themselves and their employers (MoEVT). Owing to the anticipated difficulty of achieving such agreements, teachers have resisted the process. They argue that the education sector in Tanzania faces many challenges, such as inadequate school infrastructures, that prevent them from developing a higher level of professional expertise. Teachers have called upon the MoEVT to address these challenges prior to the implementation of an appraisal system. The lack of such a system, however, allows the MoEVT to continue using the former traditional system of promotion that requires in-service teachers to be promoted after every three years of service (Sumra, 2005). The use of this promotion criterion suggests the possibility that both effective and ineffective teachers are promoted.

In conjunction with the expansion programme, the curriculum has been reviewed many times. National economic trends have required the Ministry of Education and Culture (MoEC) to make a paradigm shift from a content-based to a competency-based curriculum. This change was adopted in order to equip Tanzanian students with the knowledge and skills to enable them to solve problems facing the nation in achieving sustainable development (Kafyulilo, Rugambuka, & Moses, 2012). Furthermore, cross-curricular topics such as HIV/AIDS, health and hygiene, gender matters, and environmental challenges have been integrated into school curriculum systems (Ministry of Education and Culture, 2004). In order to implement these changes teachers had to enhance their pedagogical and knowledge base so as to become competent and confident in new subject areas. Also, in the process of programme implementation, school subject specialties like agriculture and commerce were abolished. Teachers of these subjects were forced to shift to subjects other than those they had prepared for during their pre-service training.

Despite these curriculum reviews, the number of teachers who undergo in-service training is very small. The high cost of teacher training programmes and limited financial assistance from the government results in a very high percentage of teachers not attending such programmes (Laddunuri, 2012). For example, in the 2011/2012 fiscal year, out of 51,469 secondary school teachers the MoEVT offered in-service training to only 3,042 Science, Mathematics and English teachers (Ministry of Education and Vocational Training, 2012). In contrast, when presenting the 2014/2015 budget, the Minister of Education and Vocational Training announced that in the year 2013/2014 in-service training was given to 12,476 Biology, English and Kiswahili primary school teachers (Kawambwa, 2014). This illustrates the government's emphasis on providing in-service training to primary school teachers at the expense of secondary school teachers. My research hypothesised that the government tendency to ignore secondary education in-service training was likely to have detrimental implications for teachers in the professional mastery of specific subject matter in the reformed curriculum.

1.6. Statement of research problem

Notwithstanding government and community initiatives to expand secondary education, poor student performance remains a critical problem in Tanzania. Performance has been fluctuating, with most form-four student-leavers obtaining marginal pass grades or failing completely. High percentages of failure began to increase from 2008 (16.3%) to 2010 (49.6%) and 2011 (46.4%) to 2012 (60.1%) respectively (Ministry of Education and Vocational Training, 2011, 2012). Several studies have been done to examine the factors contributing to these poor academic trends. Laddunuri (2012), for example, examined the status of school education in Tanzania, with the Arusha region being a case. The investigation found that frequent changes to the curriculum and a lack of trained teachers were among contributing factors to the performance decline. Similarly, Jidamva (2012) explored teachers' conceptions and understandings of the quality of secondary education in Tanzania. In his findings, he identified that less government attention to teacher motivation, inadequate teacher professional programmes and poor funding for the sector contributed significantly to the deterioration of secondary education quality and performance in particular.

Mlozi, Kaguho, and Nyamba (2013) and Komba, Hizza, and Jonathan (2013) investigated the factors influencing student academic performance in community secondary schools in the Mbeya and Moshi municipalities. They found that a shortage of teaching and learning materials, libraries and laboratories were among the elements associated with student failure. While the former study suggested that teaching which involved a mixture of English with Kiswahili contributed to the problem, the latter contended that a poor teaching and learning environment played an essential role in worsening student performance. Interestingly, even community, politicians and educational stakeholders support the view that the shortage of teaching and learning resources, libraries and laboratories, as well as the poor working environment for teachers currently contribute to student failure, which is labelled as “disastrous and shocking” (Twaweza, 2013, p. 1).

As will be discussed in Chapter 2, a body of research has suggested that teacher self-efficacy can play a powerful role in shaping student outcomes (Klassen, Tze, Betts, & Gordon, 2011). On the basis of the poor performance of most schools, one of the hypotheses behind this research was that secondary education expansion has had a negative impact on teachers’ self-efficacy. While local studies had demonstrated the extent to which the secondary education expansion programme produced challenges that affect student performance, little had been learnt about how these challenges impacted on teachers’ self-efficacy. This study attempted to address this gap.

1.7. Research questions

The aim of this study was to investigate the implications of Tanzania’s secondary education expansion policy initiated in 2004 for the self-efficacy of teachers in community schools. Specifically, the study set out to address the following questions:

1. How do a number of Tanzania’s community secondary school teachers describe the impact of the government’s secondary education expansion policy on teachers’ work and professional identity?
2. What salient sources of teachers’ self-efficacy emerged in the context of the government’s secondary education expansion policy?

My hypothesis was that secondary school teachers were likely to have been influenced by some or all of the following factors associated with secondary education expansion: inadequate resources; a poor teaching and learning environment; frequent curriculum changes; poor student performance; enrolment expansion; inadequate pre-service and in-service teacher education; and inadequate school inspection.

It was important for me to explore teachers' professional identity, teachers' work and teacher efficacy because they are interwoven and have an impact on teachers' professional lives, especially in the context of educational reforms (Beauchamp & Thomas, 2009; Crow & Møller, 2017; Lasky, 2005). Professional identity is developed as teachers reflect on themselves in relation to the nature of their work, and such factors as their teaching motivation, satisfaction and competence (Richards, 2006; Scherr & Johnson, 2017).

A number of authors explore or assume connections between teacher efficacy and teachers' work. While some authors (Hull, Booker, & Naslund-Hadley, 2016; Khan, Fleva, & Qazi, 2015; Marr & Wilcox, 2015) limit themselves to Bandura's (1977) definition of teacher efficacy (i.e. teachers' perceptions in relation to their ability to influence student learning), others go beyond to include teachers' work considerations (Canrinus, Helms-Lorenz, Beijaard, Buitink, & Hofman, 2012; Tschannen-Moran, Hoy, & Hoy, 1998). For the latter, teacher efficacy is task and context specific, so that if something occurs to radically change the challenge of the task (say, making it more difficult), then self-efficacy is going to be affected. The same would apply for radical changes in the structure of a teacher's work, e.g. via a major reform.

There is ample scholarship suggesting that professional identity and teacher efficacy are related concepts (Bressler & Rotter, 2017; Fuller, Goodwyn, & Francis-Brophy, 2013; Hokka, Vahasantanen, & Mahlakaarto, 2017). However, there is no consensus among authors as to how each influences or interacts with the other, although there is widespread agreement that professional identity is the broader concept of the two (Bennett, 2013; Chong & Low, 2009; Czerniawski, 2011; Dix & Cawkwell, 2011). Based on my reading of the literature, I would argue that both professional identity and teacher efficacy are key constructs which play an

important role in affecting the stance taken by teachers in relationship to their work. In undertaking this study I anticipated, also, that this relationship would operate reciprocally in the sense that teachers' work demands would have an impact on their professional identities and self-efficacy beliefs.

1.8. Rationale of the study

There were a number of reasons why I undertook this research. Firstly, I wanted to explore participants' perceptions and understandings about the rapid expansion of secondary education in Tanzania and its implications for teachers' sense of competence and confidence. I believed that identifying factors contributing to enhancing teacher efficacy would allow teachers, teacher educators, school leaders and policy-makers to monitor progress towards achieving higher professional standards and a greater sense of professional well-being in teachers. It was also my expectation that if the Tanzanian government was made aware of these negative factors, and were proactive in addressing these, they would not only produce a more confident and capable body of teachers, but also provide a means for improving student academic performance.

Secondly, since I was aware that the quality of teachers matter most, especially when it comes to student performance, an investigation of the extent to which such performance impacts on the professionalism of teachers was crucial. My study was specifically concerned about understanding how certain trends in student performance in the secondary expansion exercise in Tanzania, related to teachers' self-efficacy. Gaining in-depth insights into how this expansion policy affected teachers in their construction of both efficacy expectations and outcome expectancies, was also a study priority. As a researcher, I understood that despite implementing international conventions geared towards overcoming the educational challenges, Tanzania was also committed to addressing various local economic policies. These include the National Strategy for Poverty Reduction, the Integrated Industrial Development Strategy 2025, and the National Development Visions 2025 (The World Bank, 2012). Therefore, I surmised that the insights gained from this study could provide information towards helping the Ministry of Education to initiate programmes that would foster teachers' ability to teach in a manner that is both enthusiastic and professional (Lilja, 2014; Pajares & Graham,

1999; Poulson, 1998; Tanang & Abu, 2014). I hoped that teachers with high-ability would help their students to develop their capabilities, and hence be able to realise the set country's economic strategies and vision.

Finally, in realisation of the abundant quantitative data pertaining to teacher efficacy such as (Denzine, Cooney, & McKenzie, 2005; Hughey, 2010; Kurt, Güngör, & Ekici, 2014; Mojavezi & Tamiz, 2012; Tebbs, 2000; Wyatt, 2014), my research sought to obtain relevant data which would contribute to the body of knowledge that informs the theory of self-efficacy. In particular, these data would help redress two imbalances in the research literature, firstly by basing a study in a post-colonial developing world, and, secondly, by drawing on a rich set of qualitative data to elucidate self-efficacy effects in the Tanzanian context. My assumption was that understanding self-efficacy theory would thus enable educators to identify practices that would increase self-efficacy among secondary school teachers, and thereby increase student achievement and consequently enhance the expansion policy.

1.9. Thesis outline

This thesis is made up of seven chapters, that build on Chapter 1. Chapter 2 reviews the literature surrounding and pertaining to the present study. Specifically, the chapter discusses the historical foundations of teacher efficacy as a socio-cognitive construct, the sources of self-efficacy information, the variation of teacher efficacy across demographic categories, and the impact of environmental factors on teacher efficacy. It also reviews literature related to teacher professional identity, particularly those factors contributing to teacher identity formation and the connection between teacher professional identity and teacher efficacy. The chapter provides an overview of the status of secondary education in Sub-Saharan Africa and sets out the conceptual framework which underpinned my study. The thorough examination of this literature was important, because it helped me to establish what has been done and what has not been covered in terms of studies of teacher efficacy and professional identity, thus allowing me to identify the gaps. This process assisted me in determining the best-fit methodological approach to gather rich and relevant data, which would promote a better understanding of teacher efficacy in the context of the secondary education expansion plan.

Chapter 3 describes my research methodology, that is, the research approach and design I employed in my study. This is followed by an explanation of the study context and participants, the research instruments and how they were piloted and modified in order to collect rich and relevant data. In this chapter, I also explain how my analysis of the qualitative and quantitative data was carried out. The chapter concludes by discussing ethical issues I needed to address and challenges I encountered during data gathering, and strategies I took to address each of them.

Chapters 4 and 5 present my study findings. More specifically, Chapter 4 reports on the findings that emerged from the analysis of the closed-ended questionnaires. It elaborates on the procedures used to identify and name the itemised factors. Thereafter, the chapter presents and describes findings of items contained in each factor. Chapter 5 analyses participants' responses elicited via interviews and open-ended questionnaires. It reports on the themes developed from an analysis of these two data collection instruments.

Chapter 6 discusses the research findings in relation to my research questions, literature review and conceptual framework. Although the qualitative (interviews and open-ended questionnaires) and quantitative (closed-ended questionnaires) data were analysed independently, in this discussion chapter I compare and contrast evidence related to similar themes from both qualitative and quantitative data to obtain a stronger validation of various findings.

Chapter 7 offers a conclusion which sets out my view of the contribution and implications of my study for self-efficacy theory, research methodology, teachers and teacher educators, the government and future self-efficacy research. I conclude this chapter, and the thesis itself, with my own thoughts and reflections on what I discovered as a result of this investigation.

CHAPTER 2: LITERATURE REVIEW

In Chapter 1, I provided background on the recent expansion of the secondary education sector in Tanzania, and the associated challenges I anticipated as likely to impact on teachers' professional lives. This chapter presents a review of literature pertinent to teacher efficacy and teacher professional identity. The chapter is divided into four major sections. The first section reports on literature and studies related to teacher efficacy. The second section reports on literature and studies relating to teacher professional identity. The third section covers the literature on the rapid expansion of secondary education in Sub-Saharan Africa. Given that Tanzania belongs to this region, I will survey the Sub-Saharan literature in order to gain an overview of the status of secondary education. A particular focus will be placed on understanding the need for investing in secondary education and identifying the impediments to the quality of its delivery, which consequently affect teacher efficacy. The fourth section demonstrates the conceptual framework which underpinned my study.

2.1. Teacher efficacy

This section discusses historical perspectives on the growth of teacher efficacy as a socio-cognitive construct. It also describes factors (sources) which facilitate an individual to construct self-efficacy beliefs, and provides a critical analysis of these. The section also reviews the literature on teacher efficacy in relation to various demographic characteristics. Literature and studies dealing with the role of contextual factors as potentially impacting on teacher efficacy, such as community participation, teacher professional development, teaching morale, classroom climate, funding, and school inspection are also reviewed and discussed in this section.

2.1.1. Theoretical foundations of teacher efficacy as a socio-cognitive construct

The study of teacher efficacy was firstly carried out by the Rand (Research and Development) researchers in 1966 and was grounded in Rotter's social learning theory (Au, 2015; Isik, 2013; Kasschau, 2003; Reynolds, Miller, & Weiner, 2003; Tschannen-Moran et al., 1998). Teacher efficacy was conceived as "the extent to which teachers believed that they could control the reinforcement of their actions"

(Tschannen-Moran et al., 1998, p. 202). According to this theory, the consequences of one's actions provide a basis for one's beliefs. Thus, student motivation and performance were assumed to be relevant determinants (reinforcers) of teaching and learning behaviours (Cascio et al., 2014; Ryan & Deci, 2000; Sagone & Caroli, 2014; Zimmerman, 2000). In this sense, a teacher's efficacy was assumed to be shaped by factors which are within (internal) or beyond (external) the teacher's control. Therefore, teachers with high efficacy beliefs were assumed to do more towards enhancing student learning achievement and motivation. The theory emphasised that teachers who believe that the environment plays the primary role in affecting student learning will therefore feel that control does not lie with them. Conversely, teachers who express confidence in their ability to teach difficult or unmotivated students demonstrate a belief that student learning lies within the teacher's control. These views were critiqued by various psychologists including Bandura for the reason that they focus mainly on looking at how people behave rather than how they know things (Krause, Bochner, Duchesne, & McMaugh, 2010; Lefrancois, 1972; Santrock, 2011).

Bandura (1977) modified teacher efficacy theory. He identified teacher efficacy as "a cognitive process in which people construct beliefs about the capacity to perform in a given level of attainment" (Tschannen-Moran et al., 1998, p. 203 as cited in Bandura). From this perspective, self-efficacy is regarded as the self-perception a teacher has about his or her ability to bring about positive student learning outcomes (Goddard, 2001; Littleton, Wood, & Staarman, 2000; Locke, Whitehead, & Dix, 2013; Tsang, Huia, & Law, 2012; Williams & Rhodes, 2014). Bandura maintained that teachers' beliefs and attitudes play an essential role in determining teaching and learning effectiveness. He further emphasised that teachers' behaviours are not only be influenced by factors which exist in the environment. Bandura's significant emphasis in this new paradigm does not mean that the role of external factors in shaping teacher beliefs should be completely ignored. Rather, both environment and cognitive processes are emphasised as important factors which work together to influence teachers' self-efficacy (Brunner, Schraw, & Norby, 2011; McInerney & McInerney, 1998).

Bandura's hypothesis suggests that the most powerful self-efficacy is that which is personally constructed and environmentally reinforced. In most cases, Bandura

defined and broadened the concept of teacher efficacy while focusing on his developing social cognitive theory. In widening the theory, Bandura concentrated his attention on the confidence that an individual has in his/her capability to perform a particular activity effectively (efficacy expectation). He gave less attention, however, to the likely impact of an individual's behaviour on achieving something at an anticipated level of performance (Williams, 2010). Bandura's lack of emphasis on this aspect prompted other scholars, including Tschannen-Moran and her colleagues, to modify teacher efficacy theory in order to capture the idea of outcome expectancy. They accordingly defined teacher efficacy as the "teacher's belief in his or her capacity to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (Tschannen-Moran et al., 1998, p. 233).

Tschannen-Moran and her colleagues' definition of teacher efficacy has two major implications. Firstly, the theory suggests that efficacy expectations and outcome expectations are connected. This means that an individual becomes effective and efficient if he or she has maximum efficacy and outcome expectations (Gavora, 2011; Kingery & Glasgow, 2013; Lee, 1984; Worley & Hermansen-Kobulnicky, 2008). Regardless of how well qualified an individual may be, it is impossible for that individual to perform successfully in tasks if he or she has only efficacy expectations without outcome expectations. Secondly, it suggests that contextual factors play a key role in the construction of teachers' self-efficacy. Since contexts are unique, teachers may be very confident about influencing student learning in one context, but may feel less efficacious regarding the same outcome in another setting (Chen & Yeung, 2015; Tschannen-Moran et al., 1998). Bandura himself (2001) pointed out that individuals construct outcome expectations from observing what happens in the environment around them.

2.1.2. Sources of self-efficacy information

Bandura (1997) maintained that an individual may develop a high or low sense of efficacy to perform a particular task from four main sources. According to Bandura, *mastery experiences* are the most powerful source of efficacy beliefs. In mastery experiences, success is an integral part of the self-efficacy building process (Hodges & Murphy, 2009; Lewandowski, 2005; Loo & Choy, 2013). An individual's successful achievement of a particular task produces a cycle of impacts. For

instance, better student performance provides feedback to teachers that they are capable of positively influencing outcomes. Therefore, performance acts as a motivator for teachers to increase efforts in searching for new pedagogical knowledge and skills which can facilitate them to effect good student performance in the future. In the process of doing this, their sense of efficacy is likely to be intensified. Experiencing failure will, however, undermine their self-efficacy beliefs because they will feel incapable of effecting positive student achievement (Bandura, 1977; Eisenberger & Robert, 2005).

Vicarious experiences are the second source of efficacy beliefs identified by Bandura. This source of efficacy comes into play when an individual witnesses or observes people who are appropriate role models. Tschannen-Moran et al. (1998) insisted that “watching others teach in skillful and adept ways, especially observing admired, credible, and similar models, can affect the observer’s personal teaching competence” (p. 230). This means that individuals who observe colleagues succeeding in a particular task can then feel their own confidence increasing as they build up a knowledge bank of successful strategies that they themselves can use. Conversely, if one observes a teaching strategy using by a potential role model that fails, one may feel less confident as a result. Both observations are crucial because they give teachers opportunities to evaluate their own capabilities (Skaalvik & Skaalvik, 2007; Tsang et al., 2012; Tschannen-Moran & Hoy, 2007; Wentzel & Wigfield, 2009). After making judgments, they can, thus, decide either to use that strategy or not. However, mastery of the competencies acquired in this way requires an individual to practise the observed behaviour regularly.

Verbal persuasion is another influential source of efficacy beliefs highlighted in the literature. Bandura (1995) asserted that the constructive suggestions, feedback and encouragement an individual receives from authority figures may enhance that individual’s sense of confidence that he or she can influence learning. In contrast, negative persuasion weakens self-efficacy (Bandura, 1977, 1986, 1995; Brunning et al., 2011; Capa, 2005). Feedback about work performance may affect individual professional experiences in either way (Tschannen-Moran et al., 1998). In Tanzania, teachers obtain feedback about their teaching from school inspectors, heads of schools and other colleagues. Usually, positive feedback about teaching motivates an individual to develop or maintain their work performance. It is

important, however, to note that negative feedback may either lead individuals to find alternative strategies that can help them to improve their performance or it may discourage their endeavours altogether (Hattie & Timperley, 2007; Phan, 2015).

Physiological and emotional states are also acknowledged by Bandura (1997) to be a source of efficacy belief building, and may influence the efficacy beliefs of teachers either positively or negatively. A positive mood, energy and eagerness reinforce an individual's sense of efficacy. Negative physical states like stress, tension and fatigue can undermine efficacy beliefs. However, Wentzel and Wigfield (2009), Capa (2005), and Looney (2003) insist that whether or not physiological and emotional states contribute to a sense of either competence or incompetence depends entirely on the individual's interpretation.

These four sources of information established by Bandura are still stable across decades of research. As will be discussed in the next section, however, consensus has not been reached by researchers about which of the four sources is most influential. Crucially, Tschannen-Moran et al. (1998) and Bandura (1986) explain this lack of consensus and conclude that it is an individual's cognitive processing which determines how sources of efficacy are selected and processed. This suggests that efficacy beliefs are multidimensional and domain-specific in nature (Goodman, 2010; Jungert, Hesser, & Traff, 2014; Maher & Rickwood, 2008).

2.1.3. Critiques of Bandura's views on the sources of efficacy beliefs

Most research on sources of self-efficacy tends to support Bandura's contentions that mastery experiences are a powerful determinant of an individual's sense of efficacy construction. For example, Loo and Choy (2013) explored the sources of self-efficacy influencing the academic performance of engineering students in Singapore. The results showed that self-efficacy sources were correlated with mathematics achievement scores. Significantly, mastery experience was found to be the main predictor for academic achievement in mathematics. Similarly, Usher and Pajares (2009) studied the sources of self-efficacy among middle school mathematics students, using a quantitative approach. They found that perceived mastery experience was a powerful source of students' mathematics self-efficacy. Students who felt they had mastered skills and succeeded in challenging assignments experienced a boost in their efficacy beliefs. According to Loo and

Choy (2013), one of the major reasons that mastery experience is a powerful determinant of efficacy is that it provides the “most authentic evidence of whether one could muster whatever it takes to succeed” (p. 87).

Similarly, Britner and Pajares (2006) examined sources of self-efficacy beliefs of middle-school science students in the United States. They found that vicarious experiences were weaker than mastery experiences in helping students construct their self-efficacy beliefs, at least in this context. However, these researchers asserted that vicarious experience might be an appropriate source when students have limited prior experience, because they are eager to expand their breadth of knowledge.

Sources of efficacy formation appear to perform their function simultaneously and one source may become an intermediate source of the other. This was evidenced by the research of Looney (2003), who investigated the relationship between a professional learning community and teachers’ sense of efficacy. A total of 229 teachers from nine high schools in a middle-class school district in Maryland participated in this study. Teachers’ self-efficacy was found to be significantly and positively correlated with verbal persuasion and vicarious experiences. Teachers reported that their colleagues demonstrated effective knowledge and skills for them to learn from and adopt, and they felt more excited about teaching as a result of sharing knowledge and experiences with those colleagues. Conversely, social and collegial isolation has the potential to undermine self-efficacy because it hinders the ability of individuals to learn from each other (Milner & Hoy, 2003).

There is research evidence that vicarious experiences, verbal persuasion, and physiological and emotional states can operate as significant factors as teachers develop a sense of mastery (or not). Bandura’s emphasis on mastery experience as a powerful source of efficacy building perhaps relies on the fact that this source is built on and regularly modified by the other three sources. This idea is supported by Muretta (2004), who explored the four sources of self-efficacy using a correctional design. A survey instrument composed of scales designed to measure self-efficacy antecedents in relation to particular tasks was distributed to 434 respondents employed at an aircraft maintenance facility in California. This study empirically demonstrated that strong mastery experience, and physiological and

emotional arousal correlated with levels of self-efficacy. These results indicated that mastery experience has a greater influence in enhancing one's self-efficacy beliefs if it works alongside physiological and emotional arousal.

Although most researchers support Bandura's idea that mastery experience is the most powerful source of efficacy development, there are some who critique this perspective. Hodges and Murphy (2009), for instance, studied the influence of the four traditionally hypothesised sources of self-efficacy. They examined 99 mathematics students in an asynchronous (learning through the use of online resources) environment in a public university in the Southeastern United States. The participants completed surveys assessing their self-efficacy to learn mathematics in this environment as well as to assess their mastery experiences, vicarious experiences, social persuasion, and physiological and emotional states. Regression analysis indicated that, in this environment, the most important factors were vicarious experiences followed by physiological and emotional states. Mastery experience and social persuasion were not ranked. On the basis of this study, 1. Mastery experience plays a minimal role in enhancing self-efficacy in an asynchronous environment, and 2. Sources of efficacy beliefs are context specific.

Bandura 1995 foregrounded socio-cognitive perspectives in his conceptualisation of mastery experience in the sense that teachers' success becomes evidence to be interpreted in ways that enhance self-efficacy which then feeds forward to impact positively on student achievement. Such achievement (as a mastery experience) in turn shapes the teacher's future efficacy beliefs. However, success does not always strengthen efficacy. Also, it is not always the case that student failure undermines the efficacy beliefs of teachers because sometimes it may prompt them to increase their effort to influence learning in order to maximise student performance. A number of studies (Blackburn & Robinson, 2008; Caprara, Barbaranelli, Borgogni, & Steca, 2003; Phan, 2015; Skaalvik & Skaalvik, 2007) have found that teachers who respond to failure as a weakness feel powerless and consequently they give up teaching.

2.1.4. Teachers' self-efficacy variation across demographics

Research evidence demonstrates that the self-efficacy beliefs of teachers differ across contextual and environmental variables. Variables such as the age of students,

the age of teachers, teaching experience, gender and qualifications are described by researchers as having an influence on the development of self-efficacy. Mawhinney, Haas, and Wood (2005), for example, conducted a study seeking to understand teachers' perceptions of efficacy and of the relevance of their school environment to professional learning in a suburban region of Maryland in the United States. In general, elementary-school teachers exhibited higher collective efficacy and saw themselves as working in a school culture more supportive of professional learning communities than high-school teachers. In another study comparing teachers' self-efficacy in elementary and secondary schools, Pajares and Graham (1999) noted that elementary school teachers were more self-efficacious than secondary school teachers. Although neither of the two studies suggested reasons for this contextually associated difference, these differences in efficacy beliefs may perhaps be attributed to the nature of the task (Bandura, 1995; Tschannen-Moran et al., 1998). According to Tschannen-Moran et al. (1998), secondary or high education is a level which requires a teacher to use more complex resources to enhance student knowledge and skills than in elementary school. Secondary or high school teachers may therefore feel that teaching is not an easy task, especially when they need to engage with the more complex resources required in secondary education.

Teaching experience

Moreover, within a school, teachers' experiences and situations differ. These contextual factors play an influential role in determining their self-efficacy beliefs but in different ways. By way of illustration, studies which have examined changes in teacher efficacy in relation to length of teaching experience have produced contrasting results. Azar (2010), for example, compared the levels of in-service and pre-service secondary science teachers' self-efficacy beliefs about science teaching according to graduate-school type and extent of teaching experience. The study involved 50 pre-service and 75 secondary science teachers respectively. Azar found that self-efficacy and outcome expectancy scores of teachers increased in line with the accumulation of teaching experience. Teachers maintained that repeated experiences of success with students enriched their experiences and contributed to their robust sense of efficacy. This happens because regular teaching serves to increase teachers' subject matter mastery, hence maximising their mastery of

specific disciplines. Tschannen-Moran et al. (1998) had earlier contended that teaching experiences play a substantial role in improving teacher efficacy because, “when teachers reflect on their teaching experiences, they can attribute their success or failure to factors outside themselves, or they can assess the personal factors they brought to the task” (p. 231). Azar’s study suggested that teacher efficacy beliefs increased in a linear fashion and it supported mastery experiences as an important source of efficacy building. It offered a view that teachers always gain a sense of efficacy when they experience success with teaching.

Some studies, however, have found the reverse correlation between experience and teaching efficacy. For example, Hoy (2000) assessed the efficacy of Midwestern University prospective and novice teachers at the beginning of their preparation programme, at the end of student teaching and after the first year of employment as a teacher. The study utilised a longitudinal design with 55 participants. Hoy found that teacher efficacy increased during teacher preparation and dramatically decreased with actual teaching experience. Hoy insisted that support from school managers and principals was crucial for experienced teachers to enhance their efficacy beliefs. Hoy’s finding appeared to strengthen Tschannen-Moran et al.’s (1998) suggestion that teachers’ cognitive processes are affected by the nature of collegial assistance. The latter pointed out that in a supportive environment a teacher’s sense of competence may flourish, and vice versa. These authors concur with Bandura in suggesting that a “well created and interactive school environment significantly contributes to student academic achievement” (McInerney & McInerney, 1998, p. 7). This achievement can, in turn, enrich teachers’ sense of efficacy to impact learning.

Gender

Barco (2007) studied the relationship between secondary general, male and female teachers’ efficacy and attitudes as they related to teaching disabled students in inclusive settings. The study was conducted through the use of online surveys and telephone interviews. Even when female teachers were undecided as to whether they were confident to teach the disabled students in the inclusive setting, Barco concluded that female teachers had a greater degree of confidence than their male counterparts. Barco’s finding was itself based on the assumption that women tend to be more sympathetic to vulnerable and disadvantaged groups than males are

(Versalle & McDowell, 2005). Barco's conclusion was, however, inconsistent with Shaukat and Iqbal (2012), who assessed teachers' efficacy in relation to student engagement, instructional strategies and classroom management. In this study male teachers were found to have higher self-efficacy in classroom management than their female teacher counterparts. Shaukat and Iqbal offered a possible reason for this result, viewing male teachers as more capable of maintaining and controlling the students' disruptive behaviour than female teachers. However, it can be argued that these capacities are culturally specific in the sense that there are some cultures where male students are not encouraged to respect female teachers. Oettingen (1995) argued that "culture may affect not only the type of information provided by the various sources, but also which information is selected and how it is weighted and integrated in people's self-efficacy judgments" (p.151). This assertion suggests that cultural factors shape both teachers' cognitive growth and their teaching beliefs (Evans, Luft, Czerniak, & Pea, 2014).

Age and teaching qualifications

The literature also suggests that teachers' efficacy beliefs vary according to age. Some studies report a significant relationship between teacher efficacy and increasing age. Sridhar and Badiei (2008) compared teacher efficacy beliefs in India and Iran and found that the self-efficacy of teachers in both countries increased with age. These researchers further suggested that, when teachers change schools or experience disruptive events, their sense of efficacy is likely to decrease. These findings seem to recognise that environmental factors play a powerful role in affecting teachers' sense of efficacy (Tschannen-Moran et al., 1998). However, these investigators seemed to be less aware of the possibility that teachers' changes of school might sometimes affect their efficacy beliefs positively. The nature of the school environment into which the teacher has shifted is clearly crucial as are the reasons for changes of school. For example, if a teacher moves to a new and supportive environment, his/her self-efficacy beliefs are likely to increase (Edwards, Green, & Lyons, 2001; Moseley, Utley, Angle, & Mwavita, 2016; Rushton & Ankney, 1996).

Worrell, Watkins, and Hall (2006) examined the demographic characteristics, educational qualifications and self-efficacy attitudes of a representative sample of primary school teachers in Trinidad and Tobago. Teachers with qualifications

demonstrated higher self-efficacy than teachers who had not. In a similar way, Høigaard, Giske, and Sundsli (2011) compared the efficacy beliefs of more and less qualified teachers. In their study more qualified teachers were recognised to be better at classroom management than less qualified teachers. This suggests that during their pre-service teacher education, these teachers would have acquired knowledge and skills to enable them to successfully manage their classes. Tella (2008) reported on a study which explored the extent to which teacher variables predict the academic achievement of primary-school pupils' mathematics. The study comprised 254 and 120 primary school teachers and pupils respectively. The results revealed that teacher self-efficacy significantly correlated with pupils' achievement scores. Overall, these studies show that qualifications alone are an insufficient determinant of student achievement, and that self-efficacy also matters. The value of qualifications in efficacy enhancement sometimes depends on the nature of the teachers' working environment. Since the secondary education expansion policy in Tanzania has been implemented by teachers with a range of experiences, qualifications, gender and subject areas, I set out to gain a detailed understanding of the role of these factors through my own investigation.

2.1.5. The role of environmental factors

This section deals with the role played by environmental factors in shaping the teaching and learning practices which consequently have the potential to impact on teacher efficacy.

Community participation

Community and parental participation in educational provision has gained recognition worldwide as being vital to overcoming complex challenges related to secondary education (Ahmed & Said, 2013; Brown, Carry, Perry, & McIntire, 1996). Aref (2010) identifies five different levels of community and parental participation: contribution of resources; attending teacher-parent meetings; consultation on particular school issues; participation in the delivery of a service, often as a partner with other actors; and participation as implementers of delegated power. In a similar vein, Jackson and Stretch (1976) classified parental involvement in the following way: parents as recipients and supporters; parents as non-instructional volunteers; parents as instructional volunteers; parents as educators

and learners; and parents as decision makers. These divisions highlight the complexity and variation of parental and community engagement.

Multiple sources evidence how parents contribute to both the success of students and education (Kaberere, Muchee, Makewa, & Role, 2013; Muthoni, 2015), yet there is no clear indication of the impact parents have on how teachers feel. Kaberere et al. (2013), for example, explored the extent to which parents in rural areas in the Gasabo District, Rwanda, were involved in the education of their children and whether this involvement had an effect on school performance. A causal-comparative design was employed to compare parents' participation in high- and low-performing schools. A total of 326 parents participated in the study and were able to rate their own degrees of participation in areas such as school management, support for learning and care and protection. Findings revealed that parents were enthusiastic about the education of their children, but their involvement was challenged by the extent of the family's income and resources. For this reason, a number of parents were not able to contribute when it came to aspects of school fundraising geared towards the improvement of student learning outcome. Given the disparity amongst socio-economic status for different parents in Tanzania, it was important for me to explore the role Tanzanian parents play in influencing teacher efficacy.

Gorret (2010) explored the influence of parents' participation in secondary school management on student academic performance in Buyaga County, Kibaale District, Uganda. The study participants were heads of schools, teachers and students from six government-aided and private schools. Members of Parents' Associations and Teachers' Associations were also involved in this study. Teachers and students completed questionnaires, while heads of schools and association members were engaged in interviews. Findings revealed that parents in Buyaga County were not involved in school financial management, which led to the problem of distribution of financial resources thereby affecting student learning and achievement. Gorret recommended that parental involvement in the management of school discipline should be complemented by participation in financial management so as to produce better learning outcomes. Some studies have shown that community and parental involvement in financial decision-making ensures transparency and accountability,

and fosters readiness to contribute local resources for the benefit of schools and students (Brown et al., 1996; Yamamoto & Holloway, 2010).

Research by McDougall (2012) investigated how communities are involved with Tanzania's Secondary Education Development Program (SEDP) and the implications of community participation in this programme. The data were mainly collected through a qualitative approach involving observation, interviews and focus group discussions with heads of schools, teachers, parents and community members connected to public, private and community secondary schools in Arusha City, Tanzania. Levels of community involvement were found to be constrained by the levels of poverty and the illiteracy rates of some communities. The community illiteracy rate enabled the elite class (politicians) to take advantage and dominate the poor in decision-making processes. McDougall concluded that, as a consequence, poor people are likely to feel excluded, and may not develop the initiative and positive attitudes needed for participation. Furthermore, Pandey, Goyal, and Sundararaman (2009) employed a follow-up survey and interviews to understand the impact of community participation on the public schools in 610 villages in three Indian states. The duration of the study was two to four months. Findings revealed that community engagement in school matters produced positive results in all three states and in so doing enhanced the quality of teaching and learning.

To summarise, these studies sit alongside other literature (Bempechat, 1992; Castro et al., 2015; Desimone, 2010; Karbach, Gottschling, Spengler, Hegewald, & Spinath, 2013; Prabhakar & Rao, 2011; Sheldon & Epstein, 2005; Wang & Sheikh-Khalil, 2014) that documents the potential impact of community and parental involvement on students in terms of such effects as: cognitive growth; academic achievement; social development; emotional development; and behaviour and attitude towards school. Little, however, has been reported on how this participation affects teachers. This was a focus of my own investigation.

In-service teacher education

Continuous professional development for teachers is considered an important component in the successful implementation of an education system (Bliss & Bliss, 2003; Lauer, Christopher, Firpo-Triplett, & Buchting, 2014). It is through

professional development that teachers have opportunities to acquire, refine and adapt relevant teaching techniques. In their qualitative studies, Scott and Armstrong (2014) observed that effective professional development strengthens teachers' understandings of their subject areas, transforms their beliefs and allows them to develop critical awareness. Some literature also indicates that most teachers in developing countries are not adequately prepared in their pre-service teacher education (Hardman, Abd-Kadir, & Tibuhinda, 2012; Kelani & Khourey-Bowers, 2012; Kitta & Fussy, 2013; The World Bank, 2005). Thus, continuous professional development can be regarded as a remedy for addressing such teacher preparation deficiencies.

A number of researchers have found a significant link between teacher professional development and teaching effectiveness (Bevan-Brown et al., 2012; Hardman et al., 2015; Shawer, 2010). These researchers found that teachers who participated in regular professional development programmes used more effective teaching strategies and demonstrated more positive attitudes towards their students than those who did not. A similar finding was obtained by Piwowar, Thiel, and Orphardt (2013), who evaluated the effectiveness of a training programme for in-service secondary school teachers in classroom management in Berlin and Brandenburg (Germany). In a non-randomised, pre-post design, 19 and 18 teachers respectively engaged in a newly developed training (intervention group) and conventional training (control group) programme. All teachers reported better knowledge of classroom management after their training. These findings indicate that professional development brings about positive changes in teachers.

Regardless of the potential positive value of professional development, the literature confirms that the sustainability of such programmes is influenced by resources, principals' support and collegial support (Hudson, 2013; Vries, Jansen, & Grift, 2013). Bantwini (2012), who assessed primary-school science teachers' perspectives on their professional development in the Eastern Cape Province, South Africa, found that teachers had a negative perception about the professional development strategies used. These teachers believed that the district did not offer the necessary support and professional development facilitating tools. As a result, these teachers failed to implement the newly adopted curriculum reforms. Nabhani, Nicolas, and Bahous (2014) carried out a study regarding the views of principals on

the factors which affect teachers' professional development in Beirut and North Lebanon. Online interviews were conducted and questionnaires were emailed to 30 school principals in these regions. Shortage of time and inadequate funding were highlighted as obstacles to teachers' professional development. Nabhani and colleagues' study, however, did not really reveal how these two issues affected the professionalism of teachers, particularly their self-efficacy.

Based on a study conducted in Benin (West Africa), Kelani and Khourey-Bowers (2012) reported that professional development goals were not fully realised because some programmes did not integrate the specific content and pedagogical knowledge required by teachers. Such a finding suggests that these programmes were poorly planned, coordinated, organised and evaluated before being implemented. Lauer et al. (2014) argue that an effective professional development programme should seek an alignment between the content and participant needs; should be allocated enough time; and should provide opportunities for participants to discuss and practise. Fulfilling these conditions, they argue, should yield desired academic outcomes for students. Given that quality professional development programmes have been shown to improve student performance, I was keen to examine the influence of professional development programmes, such as they were, on teacher efficacy construction in the context of the Tanzanian secondary education expansion enactment.

Jones and O'Brien (2011), who explored professional development in European teacher education, drew attention to the way cultural factors affect how different countries support staff development. They stressed that a high-level system of centralisation is an impediment to professional development initiatives. These researchers found that because of the conservativeness and bureaucratic nature of the state governments resulting from over-centralisation, the funding of in-service, leadership development programmes was yet to happen. According to Jones and O'Brien, devolution of responsibility regarding teacher professional development is the best option. The achievement of this, however, depends on adequate resourcing at local levels. This suggests that, if there are limited resources to facilitate programmes related to teachers' professional growth, then local authorities might find themselves expected to raise more funds within the local community. Otherwise, the responsibility lies with the national government to

provide local levels with a satisfactory budget and give local authorities the autonomy to manage funding for enhancing the professionalism of teachers (Caldwell, 2009; Kelly & Williamson, 2002; Kolehmainen-Aitken, 2004; Locke, Whitehead, Dix, & Cawkwell, 2011; Sabar & Shafriri, 2006).

Engagement in continuous professional development activities varies from one country to another depending on policy priorities (Vries et al., 2013). For example, while in the United Kingdom and Germany participation of teachers in professional development activities is obligatory, in Portugal, Slovakia, Slovenia and Spain professional development activities are optional and clearly linked to career development and salary increases (Avalos, 2011; Niemi, 2015). The salary increases seem to act as a motivating strategy to engage teachers. While some teachers may be motivated to engage in various professional development activities for the sole purpose of being promoted, others may be eager to gain new teaching and learning skills in order to improve student outcomes. Motive around engaging in professional development was a focus of my own investigation, since it connects with self-efficacy construction.

Studies concerned with the impact of professional development on teachers' efficacy beliefs are mainly confined to Western countries (Althausen, 2015; Bray-Clark & Bates, 2003; DeSantis, 2013; Karimi, 2011; Wolf, Foster, & Birkenholz, 2010). These studies suggest that in-service professional development enhances teachers' beliefs in relation to their own teaching ability. Several studies on teacher professional development have been carried out in the Tanzanian context (Eliphas, 2010; Komba & Nkumbi, 2008; Mwalongo, 2011); however, they provide scant insights into how professional development affects the self-efficacy of teachers.

Teacher morale

A number of studies draw attention to the importance of teacher morale (Eggers, 2012; Houchard, 2005; Jan & Khan, 2015; Sabin, 2015; Yawson & Wonnia, 2014) and suggest that it is influenced by both internal and external factors. Rowland (2008), who studied the relationship between middle-school principals' leadership and the teachers' morale in metropolitan Atlanta, found that principals' daily practices played a major role in influencing teachers' morale in teaching. Some researchers (Campbell, 1999; Low & Marican, 1993; Wright & Custer, 1998) have

found that a lack of parental commitment, student disciplinary problems at classroom level, lack of teaching and learning materials and unfair treatment have a negative influence on the professional morale of teachers. Although such studies mention the factors that impact on the morale of teachers, they do not identify how such factors affect the quality of educational delivery.

The impact of teacher morale on student learning, the school and the well-being of teachers is reported on in a number of qualitative and quantitative studies. Wadesango (2012) explored how teachers' participation in decision-making influenced their occupational morale in some secondary schools in the Gweru Education District of Zimbabwe. A qualitative case study design was adopted, and interviews and observation were used as data collection tools. The results of this study indicate that when teachers had limited involvement in important school decision-making their morale was undermined, thus resulting in stressful school governance. Evidence shows that opportunities to participate in decision-making fosters teacher morale and motivation towards identifying more effective teaching and learning strategies, increases their problem-solving ability and helps maintain high commitment to the school (Salif, 2014; Sheppard, Hurley, & Dibbon, 2010). Smith (2009) contends that teachers feel appreciated and their morale is enhanced if they are listened to, their expertise is acknowledged and the broader school community values them.

DeBruyne (2001) argues that teachers become demoralised if they lack skills in teaching, maintaining classroom discipline and managing classroom activities. Lack of finance and other incentives, inappropriate recruitment practices and promotion policies, a lack of professional autonomy, increased workload and inadequate administrative support were also mentioned in this study as factors that lower the morale of teachers. According to the study, if these problems remain unaddressed, they can cause teacher attrition and burnout, decrease teacher efficacy and thereby decrease productivity (Bandura, 1995; Gareis & Grant, 2014).

In another study, King'oina (2015), who researched head teachers' perceptions of teachers' morale in relation to instructional work in public primary schools in Marani Sub-county, Kenya, using interviews and questionnaires, found that teachers with low morale did not fully engage in preparing teaching and learning

facilitating materials. King'oina recommended that educational authorities regularly assess teachers and give prompt feedback. Despite this study being qualitative and quantitative in nature, the causes for low morale were not clearly highlighted. In my view, without a thorough identification of factors that contribute to low morale, head teachers' regular assessment and provision of feedback will not make any difference in improving teacher morale. The identification of these factors would allow educational policy-makers to formulate, implement and execute effective strategies to enhance the morale of teachers (Blackburn, 2015).

Notwithstanding that the above investigation examined the causes and effects of teacher morale, to the best of my knowledge, only few references in the literature systematically describe the effects of morale on teacher efficacy. My own research is therefore significant because it offers insights into how the challenges accompanying the Tanzanian secondary education expansion policy impact on the morale of teachers, and in turn, influence their self-efficacy as teachers.

Classroom climate

Classroom climate refers to conditions which prevail in the classroom and which impact on a teacher's work and the learning of students. There is no consensus among authors about what specifically constitutes classroom climate. O'Brennan, Bradshaw, and Furlong (2014), and Peng et al. (2014) note that classroom climate includes the quality of air, temperature, light, humidity, desks, tables, chairs, class size, as well as available resources that stimulate five senses. Frisby and Martin (2010), however, argue that fundamentally classroom climate is interpersonal in nature because it involves the development of trust, rapport and relationships between teachers and students for effective teaching and learning to occur. In spite of such authors' differences in perspective on classroom climate, they all emphasise that classroom climate is about creating conditions which stimulate students to actively engage in learning both within and outside classroom contexts (Han, Kiatkawsin, & Hong, 2018). In this light, an establishment of a positive classroom climate is important for students to grow emotionally, socially and mentally.

Many studies show that classroom conditions can contribute to the quality of learning (Cheng, 1994; Suleman & Hussain, 2014; Umar, 2017; Virtanen, Lerkkanen, Poikkeus, & Kuorelahti, 2015). Umar (2017), for example, examined

the impact of classroom climate on learning English as a foreign language at secondary schools in Gezira State in Sudan. In order to fully realise his objective, the researcher divided students into experimental and control groups. While the former group was accommodated in a positive classroom environment (i.e., adequate resources, a seating arrangement conducive to learning, well ventilated classrooms), the latter studied under relatively poor classroom conditions. Findings indicated that there were significant differences in English achievement between experimental and control groups with the experimental group performing at a higher level. In a study of the influence of classroom participation on student learning in the American Mid-West, Fassinger (2000) found that cooperation, support and respect were more dominant in higher participation classes compared to lower participation classes.

Despite the progress of African countries in reforming education, most school classrooms are characterized by the challenge of large numbers. According to the Tanzania Ministry of Education, a standard class should contain no more than 40 students in a single stream. However, in many community secondary schools one classroom might be occupied by more than 70 students. There is ample evidence concerning the impact of class size on student learning. A study by Case and Deaton (1999) showed that at the end of South Africa's apartheid regime, higher teacher-student ratios in Black schools resulted in lower enrolment and lower numeracy rates. Jones (2016) studied the extent to which classroom composition impacts on learning among Ugandan primary schools. His findings indicated that classroom conditions, especially overcrowded classrooms, were the major factor in poor student learning outcomes.

Numerous studies conversely suggest that small classes provide opportunity for students to positively interact with teachers as well as collaborate with other students (Englehart, 2006; Malinen & Savolainen, 2016; Teodorovic, 2011). Large classes, however, are seen to intensify antisocial behaviour, e.g., withdrawing from interactions with teachers and other students and engaging in disruptive behaviours that interfere with other students' learning (Finn, Gerber, & Boyd-Zaharias, 2005; Finn, Pannozzo, & Achilles, 2003; Hart, Massetti, Fabiano, Pariseau, & Pelham, 2011; Malinen & Savolainen, 2016). A recent study conducted by Marais (2016) on the impact of classroom conditions on teaching and learning in South Africa

showed that class size determined parents' decisions about whether or not to send their children to a particular school. This study implies that these parents believe that effective learning for their children will not take place in overcrowded classroom conditions (Finn et al., 2005; Koc & Celik, 2015; Mahlo, 2015).

The link between classroom climate and student achievement has also been evident in the Tanzanian school context. For instance, when investigating the perceptions of teachers regarding the nature of resources and physical facilities in community schools in the Arusha region, Lyimo, Too, and Kipng'etich (2017) found that classroom conditions in terms of poor construction, as well as inadequate desks, chairs, tables and spacing were among factors which contributed to poor academic performance trends. In an earlier study, Vavrus and Bartlett (2012), researching teachers' experiences in relation to the implementation of new curriculum changes in Tanzanian secondary schools, found that poor classroom conditions, especially large class-sizes, were an obstacle for teachers to implement learner-centred pedagogy. These factors resulted in poor learning outcomes for students. It is evident from the studies discussed above that classroom conditions play a major role in student learning experiences. However, literature in relation to the connection between classroom climate and teacher efficacy is rare.

Funding

Education is a fundamental tool in improving the social and economic development of societies. Therefore, any country that aspires to develop and enhance the well-being of its people must consider education investment as a priority (Nair, Smart, & Smyth, 2007; Oketch, 2016; Psacharopoulos & Patrinos, 2004; Voorhees & Cooper, 2014). It is, however, important to understand that human capital investment, especially through education is expensive for governments, owners of educational institutions and parents of children (Almendarez, 2013; Tanzharikova, 2012; Tarabini, 2010; Wedin, 2010). The way a country allocate funds to various government sectors, including education, depends entirely on the state of its economy and priorities (Eedle, 1971; Liefner, 2003; Macphail-Wilcox & King, 1986). Usually, high-income nations allocate more funds to the education sector than their low-income nation counterparts. Even within the education sector, some countries focus more on a particular level of schooling than others (i.e., primary, secondary or tertiary education). In the last three decades, for example, most

developing countries, especially Tanzania and Kenya, have allocated an adequate budget to primary education and less to other levels (Sabates, Westbrook, & Hernandez-Fernandez, 2012; Sifuna, 2007). A number of authors (Liefner, 2003; Mngomezulu, Dhunpath, & Munro, 2017; Nair et al., 2007; Nicoletti & Rabe, 2018; Oketch, 2016) relate financial resource allocation in schools to educational excellence attainment. For these authors, the higher the country's investment in education, the higher the quality of teaching and learning achieved. Cobb-Clark and Jha (2013), for example, provide evidence that adequate budget allocation in Australian primary and middle schools grades enhanced literacy growth.

Since 2000, when the Education for All movement was launched (Kaag, 2018; Tye, 2014; Verger & Novelli, 2012), most developing countries have increased their commitment to improving the education sector through financial investment regardless of their poor economic status (UNESCO, 2011). The evidence available, however, indicates that despite this commitment, most African nations are not successful in meeting UNESCO's target of allocating 20% of the total government budget to the education sector. It is important to note that in order to accelerate the progress of Millennium Development Goals, donor agencies play a significant role in influencing policy decision-making and providing resources to support the education sector in developing countries (Heyneman & Lee, 2016; Riddell & Niño-Zarazúa, 2016; Tarabini, 2010). This support, however, is usually granted with conditions attached; failure to meet these conditions may result in the country not receiving the full amount. For instance, because of its failure to meet some of these conditions in the 2011/2012 financial year, Tanzania received only around 70% of the total external assistance made available to improve the education sector (Languille, 2014). Issues related to corruption, nepotism, misuse of resources and misdirection of funds are among the factors that influence donors' reluctance to fully fund this important sector. Sometimes donor agencies engage in supporting the implementation of new educational projects only at the initial stage; when their funding towards these projects cease, sustainable education is at risk (Riddell & Niño-Zarazúa, 2016; Tarabini, 2010).

Although scholars have yet to confirm whether foreign aid contributes to education sector development, a study by d'Aiglepieerre and Wagner (2013) found that aid from donor agencies, especially during the implementation of universal primary

education, increased enrolment rates and improved gender equality. However, given that external support from donor agencies “does not provide lasting solutions to a country’s educational problems” (Riddell & Niño-Zarazúa, 2016, p. 26), without African governments establishing self-reliant and strong economies, most schools will remain under-resourced and enrolment rates will be at risk. Mgaiwa (2018), who explored the status of funding in public higher education in Tanzania, revealed that budgets in higher education had been decreasing for more than six consecutive years because of donor agencies’ opting not to support the national budget. This suggests that in order to produce high-quality students, public higher-learning institutions are responsible for finding alternative ways of generating funds.

A review of the current literature also suggests that financial constraints greatly affect most African schools in different ways (Bvumbwe & Mtshali, 2018; Heyneman & Lee, 2016; Yogo, 2017). In Nigeria, for example, inadequate funding exacerbated problems in relation to the scarcity of students’ accommodation, teachers’ office spaces, and classrooms and laboratories in both primary and secondary schools (Potokri, 2015). Similarly, Tanzanian education budgetary constraints have compromised primary and secondary school students’ ability to transform what they theoretically learn in the classroom into practice (Geldenhuys & Oosthuizen, 2015; Hennessy, Haßler, & Hofmann, 2015; Languille, 2014). As with classroom climate, most of the literature and studies on funding are focused mainly demonstrating the impact on students learning. However, there has been little attempt to explore the extent to which funding has impacted on the professionalism of teaching, and teacher efficacy in particular.

School inspection

School inspection is a central issue in the current climate and educational policy-making. School inspection refers to the process of periodic, targeted scrutiny carried out to provide independent verification of the quality of schools to evaluate if they meet national or local standards, the needs of students and the society as a whole (Janssens & Amelsvoort, 2008; Kayikci, Sahin, & Canturk, 2016; Perryman, 2010). There is a widespread view (Brown, McNamara, O’Hara, & O’Brien, 2016; Hargreaves, 1995; Thomas, 1998; Wolf & Janssens, 2007) that because of on-going educational reforms, schools should be frequently inspected in order to determine

the effectiveness of reform implementation. Historically, the forms of school inspection vary between one country and another. For example, in the last two decades, only schools characterized by poor student performance in the Netherlands were inspected regularly (Ehren, Leeuw, & Scheerens, 2005; Jones et al., 2017). However, the 1992 England and Wales Education Act required secondary schools to be inspected every four years and the feedback from those inspections was to be made publicly available (Brimblecombe, Shaw, & Ormston, 1996; Courtney, 2016). Schools were required to set up action plans which demonstrated how the issues raised in the inspection report would be addressed. In this regard, school inspection is regarded as an important tool for school change and improvement (Altrichter & Kemethofer, 2015; Chapman, 2001; Ehren, Altrichter, McNamara, & O'Hara, 2013; Hargreaves, 1995; Perryman, 2007; Thomas, 1998) since it provides professional advice and guidance about teaching and learning (Jones et al., 2017; MacNab, 2004; McLaughlin, 2001).

Vanhoof and Petegem (2007) argue that because school inspection plays a significant role in ensuring educational success, improvement in both external and internal inspection mechanisms is crucial. According to these authors, schools are required to evaluate their own quality of teaching and learning and devise their own strategies for further improvement instead of relying solely on the views or suggestions of external inspectors. This would imply that school principals are responsible for setting goals for their teachers in implementing reforms (Ehren & Honingh, 2011; Gaertner & Pant, 2011; O'Brien, McNamara, & O'Hara, 2014). Hallinger and Heck (1998) found that establishing clear goals helped school principals raise school achievement. School principals have the potential to shape teachers' expectations of their teaching roles and thus raise students' opportunities to acquire sound knowledge and skills.

Information about teaching from internal inspectors is crucial in improving the education system. Principally, external inspectors provide information to policy-makers and the public about the state of the education system after incorporating reports from internal inspectors (especially school principals) (Lee & Fitz, 1998; Perryman, 2010; Shaw, Newton, Aitkin, & Darnell, 2003). This information is used to develop and evaluate educational policy (Ehren et al., 2013; Ehren et al., 2005; Harris, 2009; Thomas, 1998). For this reason, some countries provide training for

school inspectors in order to enable them to become competent classroom observers and judges, and oversee the extent to which policies are implemented within the school context. Hargreaves (1995) and Matthews, Holmes, Vickers, and Corporaal (1998) assert that inspectors who lack training are less likely to identify teaching strengths and weaknesses and thus will not be able to provide constructive feedback. Since school inspectors are trusted to monitor the quality of education, they have the mandate to take measures, including closing schools whenever they do not meet set national and local standards (Harris, 2009; Wolf & Janssens, 2007). It is therefore paramount that they are competent in this role.

Research evidence suggests that notwithstanding the contribution of school inspection to the quality of education delivery, a number of challenges are faced by inspectors. A documentary analysis carried out by Brown et al. (2016) identifies three challenges: the school's ability to carry their own inspection, trust in the school inspectorate, and the inspectors' power or influence to effect school improvement. According to these researchers, overcoming these concerns requires an integrated approach between schools and governments. Rosenthal (2004), who examined the relationship between school inspection and learning outcomes of students in the United Kingdom, found that although school inspection enhanced student examination results, the inspection process was expensive both in terms of money, preparation time and materials. Rosenthal's findings suggest that an effective inspection process requires a high budget allocation and commitment. Kayikci et al. (2016), in a mixed methods study, found that school principals in Turkey had a negative view of the school inspection system because they perceived that the inspectors did not provide useful feedback that would help them motivate teachers. The general inspection processes were regarded as ineffective. Other studies in developing countries singled out inadequate resources, an inadequate number of school inspectors (Boateng, 2014; Dembélé & Oviawe, 2007; Matthew, 2012; Mbiti, 2016), political influence and negative attitudes from inspectors (Ahmad et al., 2013; Altinyelken, 2010) as being factors which adversely affecting school inspection. It is evident, however, that much of the literature has not looked at how school inspection affects teacher efficacy.

2.2. Teacher professional identity

This section reports on the literature specific to teacher professional identity. The section has three sub-sections: teacher professional identity as a concept; factors contributing to teacher identity formation; and the link between teacher professional identity and teacher efficacy.

2.2.1. The concept of professional identity

Being aware of and thinking about the concept of teacher identity provides a better understanding of teaching both as a profession and a practice (Demirdag, 2015; Thomson & Palermo, 2014). Professional identity is necessarily fluid, multifaceted and subjective because different people view it in different ways depending on their context (Cheung, 2008; Gur, 2014; Turbill & Kervin, 2007). Cheung (2008), for example, points out that one can clearly understand the concept of teacher identity when a teacher describes his or her position while reflecting on the three basic questions: “‘Who am I at the moment? ‘What kind of teacher do I want to be?’ and ‘How do I see my role as a teacher?’” (p. 377). Based on these three questions, one can define professional identity as an ongoing process through which a teacher develops a self-image around his or her professional life. Similarly, Webb (2015) defines teacher professional identity as comprising emotional states or perceptions expressed by teachers in relation to their roles as they interact with diverse circumstances. According to Sachs (2005) “these perceptions provide a framework for teachers to construct their own ideas of how to be, how to act and how to understand their work and their place in society” (p 15).

These two definitions appear to be limited in scope because they focus on capturing and providing insights about how teachers view themselves as teachers, while overlooking how other people view the profession of teaching. Owing to this limitation, a number of researchers such as Beltman, Glass, Dinham, Chalk, and Nguyen (2015), Gibson, Dollarhide, and Moss (2010), and Siobhan (2014) have come up with a broader definition of teacher professional identity. For these researchers, professional identity is a concept that embraces how teachers see themselves as professionals in the community, their opinions on how others perceive them and how they are viewed by the society at large. To complement this comprehensive definition, Beijaard, Meijer, and Verloop (2004), Crosswell (2006),

Komba, Anangisyee, and Katabaro (2013) and Zare-ee and Ghasedi (2014) assert that teachers' motivation, job satisfaction, competence, values, micro politics and self-esteem are part and parcel of their professional identity.

2.2.2. Factors affecting teachers' professional identity formation

It is worth noting from the literature that professional identity is not something which occurs naturally, but that emerges and develops as an individual interacts with his/her professional environment. For example, Doyle (1990b) maintained that working conditions, including school culture, play a pivotal role in teacher identity formation. However, in their exploratory study of secondary school teachers' perceptions of professional identity, Beijaard, Verloop, and Vermunt (2000) found that working conditions made little contribution towards identity formation, with teaching experience being a more important factor. In this study, novice (non-experienced teachers) and more experienced teachers shared different perceptions in terms of their professional identities. The more experienced teachers demonstrated a negative professional identity in comparison with their novice counterparts. In that case, these long-serving teachers became dissatisfied with their profession. Moore and Hofman (1998) recommended that in order to influence the professional identity of more experienced teachers positively, measures to improve their working conditions were fundamental.

Goos (2005) examined how teachers learn from their experiences during the early years of teaching mathematics in their schools. It was found that there was a gap between novice teachers' perceptions of teaching during teacher education and the practical realities of classroom teaching. These teachers experienced difficulties in teaching various aspects of the mathematics curriculum in the schools they were posted to. This was mainly because of the challenging environments these teachers encountered. Goos concluded that these teachers constructed negative perceptions about the teaching profession as a result of these challenging environments. Wells (2015), in his quantitative research on the factors which might predict preschool teacher retention and turnover, revealed that nearly 40 percent of newly employed teachers were likely to quit their career of choice. The lack of positive workplace relationships, and regular classroom visits to provide support and monitor their quality of teaching in their new school environment, were among the identified factors which contributed to these teachers developing negative identities towards

teaching. In a study by Zinsser, Christensen, and Torres (2016), teachers who viewed the workplace climate of their school in negative terms became depressed and in turn lost their desire and enthusiasm to help their children to develop both socially and mentally. In another study addressing workplace stress and the quality of teacher-student relationships in Pennsylvania, Whitaker, Dearth-Wesley, and Gooze (2015) found that the two aspects correlated with each other. More specifically, workplace stress correlated with more conflict between teachers and students in the classroom. It should be noted, however, that no studies were available on the link between workplace conditions and teachers' professional identities in the Tanzanian setting.

Riza and Higgins (2005), who investigated the influence of social networks on professional identity in 136 American Master of Business Administration (MBA) students, found that the students' sense of identity strengthened over time. The more individuals engaged in their work, the more experience they gained, and the more they identified with their profession. However, although most literature about professional identity claims that teacher identity is something to be nurtured, researchers such as Kao and Lin (2015) disagree. They argue that professional identity develops from within an individual and is shaped by external forces. Hong (2010), for example, suggested that "teachers who share their knowledge with colleagues, and pre-service teachers who are trained and exposed to teaching practices enhance their professional identity as teachers in relation to their interaction" (p. 1531). Exploring factors that contribute to professional identity creation among school leaders in Turkey, Luehmann (2008) found that blogging and work experience enhanced the identities of these leaders. Initially, school leaders did not feel that they could become effective teacher leaders. However, the perceptions of these school leaders changed when they blogged with other teachers, frequently interacted with out-of-school community members and reflected on their practice. Little is known regarding the implications of networking for teacher professional identity in Tanzania, and my study has drawn attention to the need for in-depth exploration of this issue.

Another factor which can shape the identity of teachers is curriculum reform. In a qualitative study, Bolívar, Domingo, and Pérez-García (2014) examined crisis and reconstruction in relation to secondary-school teachers' professional identities in

Spain. They discovered that, despite exposing teachers to different types of training to enhance their ability to implement educational change, these teachers made little difference to their students' learning. Bolivar and colleagues hypothesised that teachers were resistant to this change as a strategy to safeguard their professional identity, because they were not involved in the general process of reforming school curricula, and thus perceived themselves as seriously isolated. The influence of staff professional development on the cultivation of professional identity is also reported on by Bodman, Taylor, and Morris (2012) and Henderson (2012). These authors contend that the current regime of neo-liberal policies makes reforms in education inevitable. In this respect, they stress the importance of mentoring, as well as seminars and workshops, for increasing teachers' motivation to implement educational reforms.

Bastick (2000) noted that the central motive for an individual in choosing a career is a crucial determining factor in professional identity. Teachers may either be intrinsically, extrinsically or altruistically motivated in relation to teaching. In a qualitative study of 101 first-year, English Language Teaching student teachers from Western State University in Turkey, Kizilaslan (2010) found that intrinsic or altruistic reasons such as love for children and English language, as well as a desire to improve the social and academic welfare of others, inspired teachers to choose a teaching occupation. Extrinsic reasons were less important to student teachers. Likewise, Tomšik (2016) looked into what intrinsic, extrinsic and altruistic motives are and their importance when students are choosing their career. This Slovakian research studied 324 pre-service teachers in their first year of Bachelor degree studies. Findings indicated that the majority of pre-service teachers were influenced by others to choose teaching as a profession. Student teachers in the Kizilaslan's (2010) study had a positive attitude towards the teaching profession and a high interest in teaching because their motivation to choose the career came from within themselves, unlike student teachers in the latter study.

In relation to Bastick's (2000) perspective, teaching in Tanzania can be viewed as one of the less respected professions because of low salaries and a perceived lack of fringe benefits (Anangisye & Barrett, 2005; Mkumbo, 2012). This makes the profession unattractive to many secondary school graduates (Ishumi, 2013; Sumra, 2005; Wedgwood, 2005). In an attempt to attract larger numbers of secondary

school-leavers into teaching, the government of Tanzania offers loans to those secondary students who wish to enrol in teacher preparation programmes. This situation prompts some secondary school-leavers to enter the profession, not because it appeals to them, but because teaching is the only profession with guaranteed loans and future employment. However, how this condition impacts on teachers' professional roles, identities and self-efficacy in Tanzanian schools has not been fully investigated.

Studies also identify that the location of schools has an influence on the professional identity construction of teachers. Preston (2012), for instance, conducted a qualitative study to investigate how eight, prairie, rural and urban teachers in Western Canada described their identities. She found that teachers in rural schools had a positive attitude towards teaching because the community worked closely with the schools. By contrast, urban teachers had negative feelings about their work because of the lack of support from parents. Ruohotie-Lyhty (2013) conducted a longitudinal research project in Finland with 22 novice teachers with regard to their identities as teachers of English as a foreign language. One of her findings was that teachers who started their career in suburban secondary schools in Eastern Finland were dissatisfied with teaching because of students' misbehaviour. According to this researcher, despite these teachers being committed in preparing classroom work, they were not able to achieve their lesson objectives since much of their time was spent on maintaining classroom discipline. Although novice teachers start their teaching in diverse Tanzanian school contexts, there is scant literature on the extent to which such contexts affect their professional identities.

Teachers' self-perceptions of success or failure can also be linked to resourcing. For instance, a qualitative study by Olsen (2016) conducted in the United States, reveals that school resources, particularly the quantity and quality of books, experimental equipment, and other materials, affect teachers' sense of competence and achievement in their teaching endeavours. Due to the scarcity of studies about the impact of school resources on teacher identity and efficacy in the Tanzanian context, I wanted to investigate the views of teachers as professionals in relation to this topic.

2.2.3. Relationship between professional identity, teacher efficacy and teachers' work

The close connection between teacher identity and self-efficacy is indicated in a number of studies. For example, Flores and Day (2006) and Shapiro (2010) demonstrated that teacher interpretations of sources of efficacy belief information are shaped by professional identity. Flores and Day (2006) reported that teachers improved their identities through regular collaboration with colleagues and co-workers within and outside the school settings. In Shapiro's study, positive emotions (e.g. care and affection), and negative emotions (e.g. anger, anxiety and frustration) determined how participants viewed themselves as teachers.

Coldron and Smith (1999), who studied active location (social space) in teachers' constructions of their professional identities, found that teachers' sense of competence can be improved by the provision of positive feedback, which is an integral part of professional identity. These three studies reflect Bandura's sources of self-efficacy information. Teachers' learning through interaction with their colleagues in Flores and Day's (2006) study highlights the role of vicarious experiences; psychological well-being in Shapiro's (2010) study exemplifies the importance of emotional states; and feedback in Coldon and Smith's (1999) study is a good example of the role of social/verbal persuasion. These few studies confirm that factors which are responsible for the construction of professional identity play an influential role in the development of teacher efficacy. On the basis of these studies, it is clear that professional identity and self-efficacy are interwoven concepts. Therefore, once a teacher's professional identity is affected, his or her sense of efficacy is also likely to be affected, a position taken by Dix and Cawkwell (2011) and Gammill (2013). Although scholars such as Canrinus, Helms-Lorenz, Beijaard, Buitink, and Hofman (2011) argue that self-efficacy and professional identity are unrelated concepts, they still maintain that the latter (i.e., professional identity) may impact on the former (i.e., teacher efficacy).

Some scholars suggest that self-efficacy beliefs have an influence on teacher professional identity. Cattley (2007), for example, argued that teacher efficacy is the main factor in shaping their professional identity, rather than wider social perceptions of the teaching profession. She suggested that feedback from colleagues and authority figures has a potential impact on the construction of efficacy beliefs

of teachers which, in turn, affect their professional identity. Similarly, Locke (2016) in her research found that intensive professional development of music teachers brought about positive impacts in relation to Bandura's four sources of self-efficacy beliefs, and subsequently shaped their sense of professional identity as both musicians and teachers of music. It is plausible that scholars who focus on the attributes of professional identity find self-efficacy be one amongst them. However, contrasting findings might result from researchers who investigate the factors having a bearing on teacher efficacy.

Regardless of these emphases, they all concur with the overall conclusion that both components (i.e., professional identity and self-efficacy) affect teachers' stance on the way their work is organised and shaped politically. My own study set out to contribute new knowledge, not only about the professional lives of secondary school teachers in Tanzania, but also more importantly, the factors that contribute towards a decrease (or not) of professional efficacy among secondary school teachers in this setting.

2.3. The growth of the secondary education sector in Sub-Saharan Africa (SSA)

In this section I will review some literature related to the situation of secondary education expansion in Sub-Saharan Africa (SSA), focusing on the rationale and challenges, as well as the quality of teaching and learning.

2.3.1. The rationale and challenges

Currently, most SSA governments have a high need for specialists in various development sectors, such as entrepreneurs, doctors, scientists, engineers, managers and technicians (Verspoor & Bregman, 2008). Significantly, secondary education in this region acts as a vital preparatory stage for vocational, technical and higher education, because it is through secondary educational institutions that students gain the competencies crucial for contributing to their country's development. The production of relevant expertise requires teachers with a high sense of efficacy. This is because such teachers are more likely to expose students to new ideas and enhance their critical thinking, as well as assist them to apply the learned competencies necessary for a country's development priorities (Bitzer, 2004; Lewin, 2007; Milner & Hoy, 2003).

The increasing impetus for most SSA governments to invest in secondary education is also driven by the global situation. Such governments recognise that global market opportunities demand highly educated people who are able to make use of the benefits of both science and technology (Figueredo & Anzalone, 2003). If this is the case, improving the labour force through the expansion and improvement of secondary schooling is recognised as crucial. Indeed, these countries anticipate that the competencies that secondary schools develop can help reduce the wide economic gap which exists between SSA and the developed world (Bitzer, 2004; Verspoor & Bregman, 2008). To achieve this, however, requires high quality teaching which stimulates creativity and a spirit of inquiry in students.

In spite of SSA's progress in investing in secondary education, most schools in this region are facing a variety of challenges that hamper the quality of education delivery (Bitzer, 2004; Buckler, 2015; Lewin & Little, 2011; Shizha & Makuvaza, 2017; The World Bank, 2005). The existence of these constraints was confirmed by Werner (2011), who investigated teacher support for universal secondary education in Uganda. Werner discovered that inadequate school infrastructure, insufficient instructional materials and a high teacher-student ratio were factors that obstructed the implementation of policy. This suggests that secondary school teachers in this country work in an environment that impedes their educational goals and negatively affects their sense of competence.

Even though most SSA countries dedicate much effort to improving the provision of secondary education, the issue of irrelevant curricula is another critical challenge (Semali & Mehta, 2012; The World Bank, 2005; UNESCO, 2016; Verspoor & Bregman, 2008). Generally, there is a great discrepancy between the school curriculum, pedagogy and assessment and the demands and needs of the people. This means that after completing their secondary school education, most students in this region are ill prepared and do not have the competencies they need to improve their livelihood and address societal problems. Governments need to ensure that there is a suitable alignment between the school curriculum and the demands of society. An appropriate curriculum balance would assist all students to obtain education of a high quality, and which is consistent with contemporary international trends and changes (Majgaard & Mingat, 2012; Verspoor & Bregman, 2008).

2.3.2. The quality of teaching and learning

Many secondary schools in SSA region are staffed by unqualified and under-qualified teachers (Junaid & Maka, 2015; Kruijer, 2010). After reporting to such schools, teachers may find there are few, in-service professional development programmes that might promote their sense of competence and confidence. For this reason, it can be surmised that secondary education in this region is below international standards because it is delivered by teachers with low qualifications and lacking on-the-job training. As a result of the deficiencies that persist in SSA secondary education systems, many students in the region perform very poorly both with respect to the countries' own standards and in comparison with norms established by developed nations (Braun, Kanjee, Bettinger, & Michael, 2006; Lynn & Meisenberg, 2010; Verspoor & Bregman, 2008). Students' poor academic performance suggests that the majority of secondary school graduates have little chance to participate in tertiary education, where specific competencies fundamental to sustaining their livelihoods are available.

It is evident, however, that poor student performance in this region is more acute among public than private secondary schools. In Nigeria, for example, private schools perform very well in terms of student achievement, when compared to their public, secondary-school counterparts (Nwangwu et al., 2005; Sabitu, Babatunde, & Oluwol, 2012). This suggests that the majority of public schools function in more challenging settings, which perhaps inhibit the quality of education delivery. Evoh (2007) maintained that the high cost of secondary education and its apparent neglect by governments and donor agencies are among the factors SSA countries need to address before they can employ more highly qualified teachers and develop relevant curricula. In addition, teacher education institutions need to be provided with the resources crucial for the training of high-calibre teachers. Thomas and Olugbenga (2012) carried out a quantitative study to explore possible relationships between teachers' qualifications and student achievement. The participants were 100 teachers and high-school physics students in Ekiti State, Nigeria. The results indicated that performance in physics was better for students taught by teachers with high qualifications than those taught by teachers with low qualifications. Similarly, the findings of a study conducted in Niger by Adama (2012) suggested that poor primary school student performance was associated with teachers whose

classroom practice relied heavily on chalk and talk. Therefore, given the extent to which poor teaching qualifications are a characteristic of education systems in SSA, it was important to me to investigate possible impacts of poor teaching qualifications on teacher efficacy.

In conjunction with issues of unqualified and underqualified teachers, studies show that secondary schools in Sub-Saharan Africa experience a critical shortage of teachers. This challenge, however, is more prevalent in rural schools than their urban counterparts. Evidence, for example, shows that only 147 out of 264 novice teachers who were posted to teach in the rural Central Region of Ghana reported to their work-places (Buckler, 2015), that is, more than 40% of teachers did not report to their assigned schools. Similarly, 600 teachers who were located in Zambian rural schools in the 2007/2008 academic year did not show up (Zambian Economist, 2008). Literature around rural secondary schools in Sub-Saharan Africa suggests that a lack of water, electricity, internet services and hygienic toilets are among the factors that discourage teachers from teaching in rural areas (Bennell & Akyeampong, 2007; Mulkeen, Chapman, DeJaeghere, & Leu, 2007). Studies which demonstrate the extent to which rural schools suffer from teacher shortages in SSA are numerous (Bouhali & Rwiza, 2017; Mulkeen & Chen, 2008; The World Bank, 2005); however, they provide limited evidence on how this teacher shortage mediates teacher efficacy beliefs.

Although there is little research literature currently available from SSA countries, studies point to a connection between the rapid expansion of secondary education and the significant challenges affecting academic achievement (Conn, 2014; Lewin, 2007; Sutherland-Addy, 2008; Verspoor & Bregman, 2008). Research also emphasises that if this expansion is not properly managed, growing inequality in terms of gender, social class and regional differences is possible (The World Bank, 2008). Consequently, these countries may experience more severe development disparities in the future. However, little research has addressed how this rapid secondary education expansion together with associated challenges has impacted on teachers' self-efficacy.

2.4. Overall summary from literature reviews

Even if there is no consensus between psychologists about the definition of teacher efficacy, the definition expanded by Tschannen-Moran and her colleagues is persuasive as it includes the two-dimensional measures: efficacy expectations and outcome expectancies. The surveyed literature and studies demonstrate that the relationship between sources of efficacy beliefs and teachers' constructions of self-efficacy are not predictable in a general sense because of the uniqueness of the individuals involved, the context and the nature of the task. It is, however, noted that most studies that contest Bandura's views tend to be quantitative. The literature I reviewed demonstrates a lack degree of variability in teacher efficacy in relation to a range of demographic characteristics.

It is also clear from the surveyed literature that challenges that hinder the quality of secondary education delivery in Tanzania are similar to those of developing countries and Sub-Saharan Africa in particular. In my own study, I hypothesised that these challenges could be affecting not only effective student learning but also the teachers who facilitate the teaching and learning processes. The surveyed literature and studies, however, provided the basis for a conceptual framework that enabled me to investigate the dynamic interplay between teacher efficacy and the process of secondary education expansion in Tanzania. This is discussed in the next section.

2.5. This study's conceptual framework

Secondary education expansion in Tanzania was the result of a joint initiative between the central government and the community. The quality of education of all schools is regularly monitored by school inspectors. These school inspectors work closely with the government's Ministry of Education in order to ensure that secondary education goals are effectively and efficiently achieved. These inspectors, in turn, interact with different teachers who influence student learning in diverse circumstances. Within the school context, however, teachers interact with heads of schools who manage their teaching and other administrative concerns. Thus, it is clear that in their work, secondary school teachers interact with educational officials and heads of schools as well as the communities in which their schools are located. I anticipated that such interactions would have an impact on their teaching

behaviour and in particular on their self-efficacy beliefs. For this reason, my study employed Bandura's social cognitive theory in an attempt to understand the multifaceted nature of secondary education expansion and its implications for teachers' self-efficacy construction are concerned.

The theory contends that teachers' self-efficacy construction is the result of interaction between personal, behavioural and environmental factors (Bandura, 1977, 1986, 1997; Sell, Amella, Mueller, Andrews, & Wachs, 2016). According to Bandura, these factors interact in a triadic, reciprocal, conditioning fashion to influence the functioning of each of the three factors. The theory explains that people act on their environment, but are also influenced by the environments in which they work. People's behaviour is affected by environmental factors which are, in turn, influenced by their behaviour. Finally, the theory stresses that personal factors such as beliefs, ways of thinking and cultural dispositions are influenced by people's behaviour and in turn affect their behaviour (Bandura, 2001; McInerney & McInerney, 1998; Pajares, 1996; Sell et al., 2016). I hypothesised, then, that secondary school teachers' sense of efficacy in Tanzania was likely to be influenced by a range of factors. In the process of implementing the government's secondary education expansion policy, teachers in Tanzania also interacted with peer teachers who had diverse traits and understandings. Teachers' interactions with such diverse contextual factors would, I anticipated, have an influence on the construction of their efficacy beliefs, which would have a flow-on influence on student learning (Bandura, 1986, 1997, 2001; Goodman, 2010).

Typically, the nature of the teaching and learning context strongly determines the construction of beliefs and attitudes of teachers which, in turn, may influence their teaching behaviour (Bandura, 1995; Driscoll, 2000; Slavin, 2009). Teachers who work in supportive environments are likely to construct positive beliefs and attitudes that will increase their sense of professional capacity to affect learning (Collie, Shapka, & Perry, 2012; Jungert & Rosander, 2010; Tran & Le, 2015; Yin, Huang, & Wang, 2016). Conversely, unsupportive settings may undermine teachers' sense of competence and their confidence. However, the literature suggests that sometimes teachers construct positive efficacy beliefs when they work in challenging situations and experience success with difficult tasks despite little support (Liu & Matthew, 2005; Robbins, 2001; Vygotsky, 1987; Wertsch, 1985).

Indeed, secondary schools in Tanzania function in environments associated with multiple intimidating challenges such as enrolment expansion, inadequate resources, poor student performance, curriculum changes, inadequate school inspection, inadequate funding, poor classroom climate, a reduced focus on teacher performance appraisal and inadequate pre-service and in-service teacher education. This study investigated the impact of such challenges on teacher efficacy.

I expected that teachers would exhibit a range of personal beliefs and attitudes around their capacity to influence learning in such situations. These personal factors I saw as likely to be influenced by environmental and cultural factors that were specific to the schools themselves and their locations (Bandura, 1995, 2001; Dai & Sternberg, 2004; Kasschau, 2003). The beliefs and attitudes developed by teachers in response to these challenges might, consequently, affect their sense of self-efficacy and hence their teaching behaviour. Since teachers' behaviours are unique (Barker, Pistrang, & Ellioth, 2002; Capa, 2005; Kasschau, 2003), these teachers might consequently develop different response mechanisms. Some teachers might respond to the policy positively while others might respond in a negative manner. Some teachers might respond to the policy by increasing their effort and being creative in achieving the school's goals while others might respond negatively (Brunning et al., 2011; Driscoll, 2000; Shanahan, 2014; Torombe, 2013). Figure 2.1 below illustrates my thinking about the dynamic interplay between teachers' sense of efficacy and the processes of secondary education expansion.

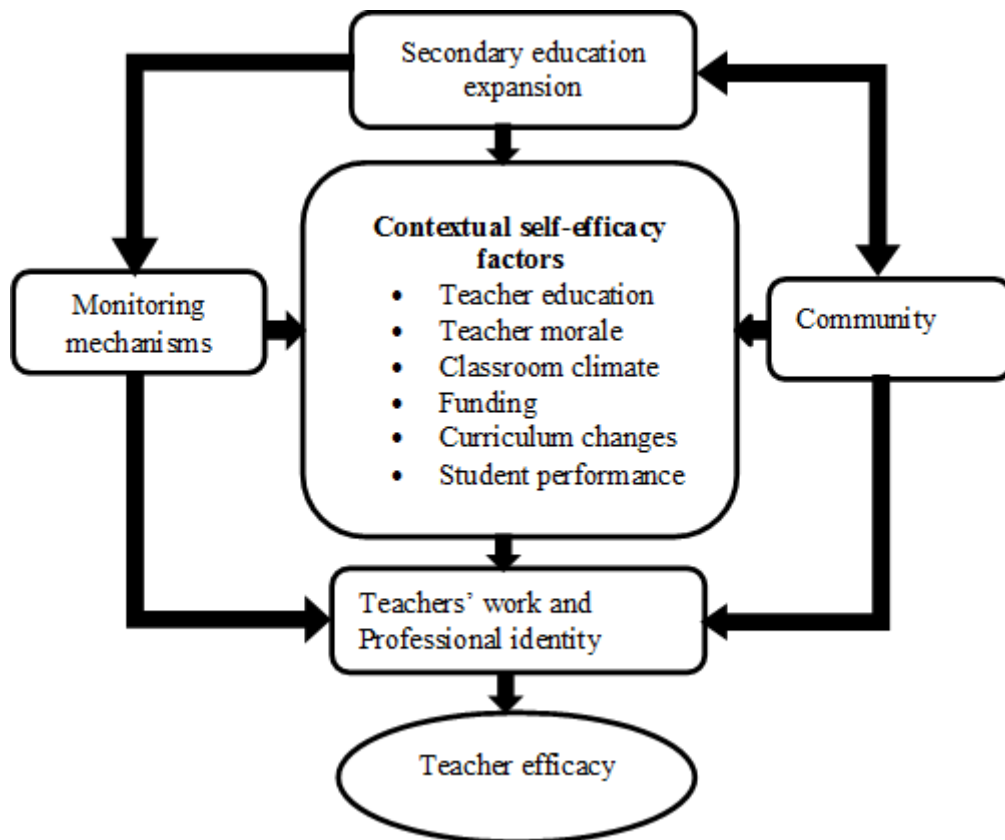


Figure 2.1: Teacher efficacy and secondary education expansion conceptual model

As indicated in Figure 2.1, the community had a part to play in the secondary education expansion. The policy required the community to build at least one secondary school within their locality in order to absorb primary school graduates. In order to ensure that the policy was successfully implemented, the government and the community agreed to take specific roles and responsibilities. Usually, the community was assigned the role of securing funds and contributing labour for the construction of school infrastructures, while the government committed itself to supporting community initiatives by providing teaching resources and staff. Since these schools were built by communities with contrasting socio-economic means and views on education, it was likely that schools would differ from one another. Also, it needs to be noted that most community secondary schools in Tanzania operate as day schools (i.e., do not offer boarding). This means that student discipline is the responsibility of both teachers and local parents. As part of their work, teachers will interact with the community and students who may well come from a variety of backgrounds and cultures. As participant teachers interacted with

such contextual factors, I expected them to develop subjective perceptions based on what they were experiencing. These diverse perceptions would influence their teaching and their sense of themselves as teachers, as well as their self-efficacy. Moreover, student performance might be expected to vary across schools because of unique contextual factors. Again, I anticipated this have an impact on teachers' practice and their efficacy beliefs. Overall, I expected that the utilisation of Bandura's social cognitive theory would help explain how teachers "constructed" what secondary expansion meant for them and how this impacted on their teacher efficacy.

CHAPTER 3: RESEARCH METHODOLOGY

A critical analysis of the review of literature presented in Chapter 2 enabled a justification of this project and enabled me to hypothesise a dynamic link between teacher efficacy and the processes of secondary education expansion. This chapter provides an overview of the methodology of the research project, which sought to understand how this dynamic interplay impacted on teachers in Tanzania. In addition to a description of the research approach and design, the chapter reports on the study context and participants, and instruments of data collection. The rationale for this data collection instrumentation is explained and justified. The chapter also describes the data analysis procedures and potential ethical issues and how these were addressed. Finally, this chapter points out some challenges which arose during the study and the strategies I used to tackle them.

3.1. Research design and approach

This study employed a mixed methods case study approach in an attempt to understand the implications of the government's secondary education expansion policy for the efficacy beliefs of teachers in Tanzania. Typically, mixed method research integrates both qualitative and quantitative forms of data in a single study in order to view the phenomena under study from multiple perspectives (Gray, Mills, & Airasian, 2012; Hesse-Biber, 2010; Ivankova, 2015). Therefore, I used these two forms of data because I believed they could provide the opportunities to shed light on the research questions in different ways. More specifically, my study was concerned with understanding the perspectives and experiences of Tanzanian teachers in relation to the government's secondary education expansion project. The diverse working environments in which the teachers in Tanzania implemented the government's secondary education policy would, I surmised, illustrate how different working environments affect the self-efficacy of teachers to bring about effective learning. Therefore, it was deemed appropriate to utilise a mixed methods approach that allowed me to capture the depth and lived experiences of teachers, because they were the ones who implemented the policy and had experienced its effects.

In quantitative studies, data are collected and presented in the form of numbers which include percentages, frequencies, graphs and tables of data, as well as

average scores (Burns, 1990; Carter, 2004). In contrast, data in qualitative studies are dialogically gathered and presented as analytical narratives including quotations (Best & Khan, 2006; Bordens & Abbott, 2008; Corbetta, 2003). In my own investigation, a mixed methods case study was deemed desirable as affording me to obtain a rich, holistic, nuanced understanding of the context in which teachers implemented the expansion policy.

Green, Camilli, and Elmore (2006, p. 128) note that Cresswell (1995) and Greene (1994) identify five reasons for using mixed methods research. They are:

- Triangulation (convergence of results)
- Complementarity (overlap as well as differences in data that may emerge)
- Sequential development (using one method to confirm another)
- Initiation (identifying problems that may emerge in the data, alongside the development of new perspectives on the research topic)
- Expansion (adding depth and breadth to the research findings)

My study adopted a mixed methods approach to allow the use of triangulation, complementarity, initiation and expansion.

Some researchers argue that although in mixed methods studies both qualitative and quantitative forms of data are important, more often one type is selected as dominant in order to allow a sound integration of ideas (Ivankova & Creswell, 2009; Onwuegbuzie, Bustamante, & Nelson, 2010). In my study, a qualitative approach was seen as dominant because “the data collection and analysis procedures are more sophisticated, complex and discussed more extensively when the study is presented” (Ivankova & Creswell, 2009, p. 138). Likewise, my data collection procedures were focused on obtaining as much qualitative information as possible. In this case, the quantitative data served to strengthen some of the qualitative findings which emerged as clusters of themes and subthemes. A sequential development study requires the researcher to collect one type of data in order to inform and to help him or her to develop new instruments for collection of another type of data (Cresswell, 2002; Durham, Tan, & White, 2011; Green, Kreider, & Mayer, 2005). However, my study was not adopted for sequential development purposes because both qualitative and quantitative data were gathered simultaneously.

Mixed methods research is primarily concerned with developing a complementary holistic picture that relates to the social worlds of the participants (Cresswell, 2002; Green et al., 2005; MacMillan & Schumacher, 1993; Vandestoepe & Johnson, 2009). As data are gathered in a particular context, the social worlds of the participants are acknowledged to be of significant value in understanding the phenomena under investigation (in this case, teacher efficacy beliefs).

My study adopted the stance of a pragmatic researcher in order to obtain numerical information and make sense of the data from the participants' perspective (Ivankova & Creswell, 2009; Wellington, 2008). Pragmatic researchers propose that even within the same study, "qualitative and quantitative methods can be combined in creative ways to more fully address the research questions" (Lodico, Spaulding, & Voegtler, 2006, p. 9). My study sought to explore teachers' opinions and interpretations regarding the implications of secondary education expansion for their professional work lives. Therefore, gaining detailed insights about teachers' understandings of the expansion policy aligns with the emphases of the pragmatic researcher.

In addition, a pragmatic philosophy allows the researcher the freedom of choosing diverse data collection procedures and techniques, as well as making different assumptions in relation to the findings (Croker, 2009; Green et al., 2005; Wagner & Okeke, 2009). Thus, in my study, multiple data collection methods were used to gather significant information from the participants to contextualise the research and triangulate the findings. The combined data from different sources served to facilitate a rich understanding of the unique lived experiences of the participants in the specific context, hence maximising the validity of my findings and conclusions (Mutch, 2013; Wiersman, 1986). The pragmatic standpoint differs from that taken by positivist and interpretative researchers, who believe that quantitative and qualitative data work as independent entities, because each of them uses different methods to study different phenomena (Gall, Gall, & Borg, 2007; Gray et al., 2012; Wagner & Okeke, 2009). Pragmatic researchers regard mixed methods research as useful because the strengths of qualitative and quantitative data are combined to enrich the study findings. Therefore, I adopted the stance of the pragmatic researcher because it enabled me to make use of the combined advantages of

qualitative and quantitative data to enhance the thick description my research project aimed to develop.

3.1.1. Case study design

As noted earlier, the government secondary education expansion in Tanzania and its implications were investigated using a case study design. A case study is a “detailed examination of one setting, one single subject, or one single depository of documents, or one particular event” (Wellington, 2000, p. 90). Case studies are clearly distinguished from other forms of qualitative and quantitative inquiry owing to the fact that such studies focus on a bounded system (Green et al., 2006; MacMillan & Schumacher, 1993). A bounded system can be an individual, group, school, classroom or programme that the researcher is interested in examining. Case study research involves consideration of the site and its contextual features, and an estimated time required by the researcher to undertake a study in that particular site. So, in this instance, the bounded system embraced the secondary schools, teachers and the region in Tanzania where these sample schools were located. Case study design allowed me to directly interact with the natural settings (schools) in order to get first-hand information in relation to teachers’ views (Green et al., 2006) on the secondary education expansion policy.

A case study design was also appropriate as my study sought to address two major “how and what questions” (Cohen, Manion, & Morrison, 2011; Cresswell, 2009; Kervin, Vialle, Herrington, & Okely, 2006; Wellington, 2008). Firstly, it intended to explore *how* teachers described the impact of the government’s secondary education expansion policy on teachers’ work and identity. Secondly, my study examined *what* salient sources of teachers’ self-efficacy emerged in the context of the government’s secondary education expansion policy. A case study design was appropriate to address these questions. It was my expectation that this design would enable me to obtain a rich, complex and nuanced account of the phenomena under investigation.

Hood (2009) note that Stake (1995) distinguished three main categories of case study: intrinsic (a single case is studied because there is something unique about the particular case); instrumental (investigates a typical example in detail in the expectation that it will offer insights that will illuminate a particular phenomenon

or theory in other similar cases); and collective or multiple case study (more than one case is studied). The boundaries between categories of case studies are not clearly delineated, because a case study may fit more than one category. My study specifically utilised a collective or multiple case study design. In multiple case study design, a number of cases that are anticipated by the researcher to provide detailed insights into an issue, problem or a theory are selected to serve the purpose (Cohen et al., 2011; Hood, 2009; Howitt & Cramer, 2011; Taber, 2013). Therefore, choosing numerous cases to study helped me to capture a wide range of participants' views that could not be obtained through surveys alone. These views, in turn, strengthened my study findings because the findings from these single cases were triangulated with each other (Green et al., 2006; Howitt & Cramer, 2011).

My study was conducted in the region of Iringa in Tanzania. Iringa was one of the regions that managed to have at least one community secondary school in each ward as per government directives. It was also a region with both high- and low-performing community secondary schools (Ministry of Education and Vocational Training, 2011, 2012; The United Republic of Tanzania, 2012). Four community secondary schools (two high- and two low-performing) and all teachers in the sampled schools in the region were the cases for my study. The national examination results for the past five years were used as the basis for selecting the schools to be involved in this study. The investigation was carried out over six months. Carefully selecting a range of schools resulted in an appropriate sample characterised by maximum variation (see next section). This allowed for a complex set of findings related to the government's secondary education expansion policy and its impact on the efficacy beliefs of teachers.

3.2. A description of the study context (schools) and overview of participants

This section describes the context of each of the sampled community secondary schools. The Iringa region has four administrative district councils, namely the Iringa district, Mufindi, Iringa Municipal and Kilolo. The schools for the study were distributed across all these district councils in the region. One community secondary school was selected from each district council. The selected schools have been labelled using pseudonym as Mafanikio, Chuoni, Nyikani and Bondeni in this study. Detailed information on each of these schools is presented below.

“Mafanikio” School

Mafanikio School was situated in the Mufindi district. The school was 16 kilometres inland from the highway running from Dar es Salaam (Tanzania) to Zambia, Malawi and the Democratic Republic of Congo. This school was surrounded by forest reserves and tea estates. Near the school there were three dams which served to provide water, potentially for industrial use, tea plantations, irrigation and fishing. Owing to the influence of forests and hills, this area received reliable rainfall throughout the year. The wet climate brought about by regular rainfall encouraged most people residing in this area to participate in commercial and subsistence farming. Most people in this area were engaged in the production of wattle-trees for charcoal, pine-trees for timber, and mast-trees for electric and telephone poles. Although the original ethnic group in the area was Hehe, this group intermingled with other people from different parts of the region who were employed in the aforementioned sectors. Therefore, the local school had a considerable number of people with diverse ethnic backgrounds.

This school was non-boarding for forms one to four and a boarding school for advanced levels of schooling (forms five and six). The school was established in 1988 under the auspices of a company known as the Mufindi Education Trust (MET). In 2004, after the secondary education expansion policy was launched, this school was handed over to the government as a community secondary school. The advanced level of schooling was officially integrated in this school in 2008. The total number of students was 1113, of whom ordinary level students totalled 949 and advanced level students totalled 264. Of the 1113 students, 361 were boys and 752 were girls. The school had 41 teachers, nine of whom had diploma qualifications and 32 bachelor's degree qualifications. Since the advanced level of schooling was included, this school was considered an exemplary model for community secondary schools in the country due to its excellent student performance. Furthermore, in 2011 the school was ranked 46 out of 334. The year 2012 saw a significant improvement in ranking (13 out of 326). In 2013 and 2014 it was ranked 8 and 1 out of 329 and 268 schools respectively. Although the academic performance for advanced level students stood out both regionally and nationally, the ordinary level students demonstrated average performances when ranked regionally. For example, in 2009 and 2010 the school was ranked 38 out of

136 and 66 out of 181 respectively. Likewise, in 2011, 2012 and 2013 the ranking of the school was 66 out of 188, 59 out of 207 and 55 out of 124 respectively.

In Mafanikio School, 25 teachers completed the questionnaire (see Appendix 15). In addition, four teachers participated in individual and four in focus group interviews respectively. Table 3.1 below presents the demographic information for each of the teachers who took part in face-to-face dialogue.

Table 3.1: Mafanikio School interview participants

Name¹	Nature of dialogue	Gender	Subject (s)	Years of service	Qualifications
Wililo	Individual Interview (IT1)	Male	English	27	Bachelor's degree
Kihombo	Individual Interview (IT2)	Male	History	11	Bachelor's degree
Jackson	Individual Interview (IT3)	Male	Geography	25	Diploma
Furaha	Individual Interview (IT4)	Female	Mathematics	10	Bachelor's degree
Mikogo	Focus Group (FG1)	Male	Civics and General Studies	7	Bachelor's degree
Mapambo	Focus Group (FG1)	Female	Biology	3	Bachelor's degree
Sanga	Focus Group (FG1)	Female	Kiswahili	2	Bachelor's degree
Kiongozi	Focus Group (FG1)	Male	Mathematics and Physics	29	Bachelor's degree

¹ All teacher names are pseudonyms.

Wililo was the headmaster of Mafanikio School. When the school was under the Mufindi Education Trust, he had a diploma in Education and was a classroom teacher. However, after the school was handed to the government as a community secondary school, he was appointed to the role of the head of school (headmaster/school principal). While undertaking his school leadership role, he succeeded in attaining a bachelor's degree in Education through the Open University of Tanzania. In addition to his school leadership role, Wililo was selected to be the chairperson of the Tanzania Heads of Secondary Schools Association (TAHOSSA) in the Southern Highland zone of the country, which involved the regions of Iringa, Mbeya, Rukwa and Ruvuma. Like Wililo, before the school was owned by the government, Jackson and Kiongozi were MET employee teachers. However, when the school was handed over to the government, these teachers became civil servants.

Kihombo was the academic master of Mafanikio School and was employed by the government soon after completing his diploma in Education. After serving in the school for two years he pursued a bachelor's degree in Education. Like Kihombo, after the completion of her diploma in Education, Furaha was also posted to Mafanikio School and succeeded in advancing her qualification to a bachelor's degree. During the period of my study, Furaha was pursuing a master's degree in Mathematics. Mikogo joined the school as a "licenced teacher" after attending a four-week "crash programme" in one of the teacher colleges in Tanzania. After teaching for two years, he pursued a bachelor's degree in Education, which made him a professional teacher. Unlike the other teachers mentioned, Mapambo and Sanga were employed by the government to teach in this school immediately after completing their undergraduate studies in various teacher education institutions in Tanzania.

"Chuoni" School

This school was situated in the Iringa Municipal Council and located nearby the teacher education college. The school was in the vicinity of one private secondary school, one public government secondary school, one institute of adult education, and some government and private primary schools, as well as the Zonal School Inspectoral Department. In Tanzania, the Zonal School Inspectoral Department is one of the crucial mechanisms for monitoring a school's quality in relation to

teaching and learning standards. In the municipality where the school was situated there was also one public university college of education and two Christian universities. Many religious organisations, churches and facilities were also located in this municipality, and some were very close to the school.

In addition to the aforementioned institutions located near the school, there was also a regional library built by the government in the 1970s in order to help people in the region to gain agricultural, commercial and subject specific knowledge, skills and attitudes in order to enhance their livelihoods. Most of the regional administrative offices were found in this municipality, and many people from other regions of the country were attracted to this area because of the social and economic services available. While some people in this municipality were involved in big business, small-scale business and farming, others worked as civil servants in the government sector. These activities made the municipality one of the most densely populated, multicultural district councils in the region.

This school was a co-educational, ordinary-level school which was officially established in 2004, as a practising community secondary school for forms one to four. The school had a total of 959 students, of whom 463 were boys and 496 were girls. The total number of teachers was 33, seven of whom had diploma qualifications, 24 had bachelor's degree qualifications and two had master's degree qualifications. Like Mafanikio School, Chuoni School was also among the few schools whose student achievement trends were a model to other community secondary schools within this region. The ranking of the school was as follows: in 2009, 11 out of 136; 2010, 23 out of 181; 2011, 24 out of 188; 2012, 23 out of 207; and 2013, 15 out of 124.

In Chuoni School, 15 participants filled in the questionnaires (see Appendix 15). In addition, one-to-one and focus group interviews were conducted with four different teachers for each method. Table 3.2 below demonstrates the demographic information of these teachers.

Table 3.2: Chuoni School interview participants

Name	Nature of dialogue	Gender	Subject (s)	Years of service	Qualifications
Kileo	Individual Interview (IT5)	Male	Mathematics	18	Bachelor's degree
Tembo	Individual Interview (IT6)	Male	Biology and Chemistry	13	Bachelor's degree
Mtendzi	Individual Interview (IT7)	Male	Civics	33	Master's degree
Mwavita	Individual Interview (IT8)	Female	Biology and Chemistry	10	Bachelor's degree
Huruma	Focus Group (FG2)	Female	Biology and Chemistry	7	Bachelor's degree
Mkude	Focus Group (FG2)	Male	Biology and Chemistry	5	Bachelor's degree
Mgosi	Focus Group (FG2)	Male	History	12	Bachelor's degree
Itowa	Focus Group (FG2)	Female	Kiswahili	7	Bachelor's degree

Kileo was the head of school (headmaster) of Chuoni School. Before being appointed as head of school, he was a tutor at the teacher's college located near the school. Previously, he had obtained a Diploma in Education and later had advanced his qualification to a bachelor's degree. Tembo was among the graduates from the nearby teachers' college. He had had a diploma in Education and later decided to enhance his career by obtaining a bachelor's degree. Before being transferred to this school, Tembo taught in a public secondary school in the Iringa region. In addition to teaching, Tembo also served as the second master (assistant/vice principal) of the school.

In contrast to Kileo and Tembo, Mtendzi had a different educational background and work experiences. After the completion of his Diploma in Education thirty years before, he was employed by the government to teach in one of the public secondary schools in the region. Whilst performing these teaching duties, he had succeeded in upgrading from a diploma to a master's degree in Education. Apart from being a teacher, in the last decades Mtendzi had also served as the head of various public and community secondary schools in Tanzania. Mwavita, Huruma, Mkude and Mgosi also had Education diplomas, which they all later upgraded to

bachelor's degrees. With the exception of Mkude, these three teachers had been trained at the nearby teachers' college. Finally, Itowa, who formerly taught at one of the teachers' colleges in the central part of Tanzania, had recently transferred to the staff of Chuoni School.

“Nyikani” School

Nyikani School was located in the Iringa District Council in Ulete village. The distance from the council to this village was about 46 kilometres, and the distance from the main road to the school was about four kilometres. The school was surrounded by the village's forests. In the village where Nyikani School was situated there was a Roman Catholic co-educational, ordinary-level school and one public primary school. The most prominent ethnic group in the surrounding villages was the Hehe. Culturally, the Hehe's major economic activity was agriculture. However, the infertile soil and drought conditions of this area were an obstacle to sustainable farming. As a result, the Hehe cultivated the limited amount of arable land available in the valley to grow food crops such as onions, tomatoes, Irish potatoes, maize and beans. Since the area experienced frequent, cold weather conditions, most crops took a long time to mature. This situation led the Hehe to engage in brewing local alcohol and bamboo juice to earn some money to purchase food stuffs for their families. The harsh climatic conditions meant that the area was sparsely populated.

Nyikani School was a co-educational, ordinary-level school established in 2005. The school had a total number of 244 students, of whom 145 were boys and 99 were girls. The number of teachers was 17, of whom five had diploma qualifications and 12 had bachelor's degree qualifications. Compared to Mafanikio and Chuoni Schools, however, this school demonstrated very low student academic performance in terms of both regional and national standards in the final fourth-form examinations. For several years this school was ranked amongst the lowest performing in the region. For example, in 2009 and 2010 the school was ranked 111 out of 136 and 159 out of 181 respectively. Other rankings were as follows: 2011, 184 out of 188; 2012, 207 out of 207; and 2013, 124 out of 124. This school also produced a very small number of ordinary-level students who progressed to an advanced level of education and other post-ordinary career training.

In Nyikani School, 16 teachers completed the questionnaire (see Appendix 15). Additionally, individual interviews and focus group interviews were carried out with three and four teachers respectively. Table 3.3 below presents the demographic information of these teachers.

Table 3.3: Nyikani School interview participants

Name	Nature of dialogue	Gender	Subject (s)	Years of service	Teaching qualifications
Disma	Individual Interview (IT9)	Male	Chemistry	14	Bachelor's degree
Nyuki	Individual Interview (IT10)	Male	Geography	16	Bachelor's degree
Pendo	Individual Interview (IT11)	Female	Kiswahili	10	Bachelor's degree
Igubike	Focus Group (FG3)	Female	Geography and Civics	9	Bachelor's degree
Mwema	Focus Group (FG3)	Female	Geography	9	Bachelor's degree
Riziki	Focus Group (FG3)	Male	Biology	1	Diploma
Msaka	Focus Group (FG3)	Male	Physics and Chemistry	1	Bachelor's degree

Disma was the headmaster of Nyikani School. Immediately after completion of his diploma in Education, he was posted to teach in one of the public secondary schools in the region. While teaching, he upgraded his qualification from a diploma to a bachelor's degree in Education. Disma was appointed by the Ministry of Education and Vocational Training to replace the former retired head of school. Like Disma, before upskilling to a bachelor's degree, Nyuki had a diploma in Education. Prior to being posted in this school, he was teaching in one of the private secondary schools in the Iringa region. In addition to teaching, Nyuki was the deputy headmaster.

Pendo was also posted in this school after completing her diploma in Education. She taught in this school for three years, and then went on to one of the teacher education institutions to pursue her bachelor's degree in Education. As well as teaching, Pendo worked with a Non-Governmental Organisation (NGO), the Campaign for Female Education (CamFEd). This organisation supports marginalised and vulnerable female students in some district councils of the Iringa region. Igubike and Mwema shared the same educational background in the sense that they were both employed in this school as "licensed teachers" after attending a one-month induction programme. However, these teachers were successful in advancing their qualifications to bachelor's degrees and they were now professional teachers. Unlike other former teachers, Riziki and Msaka were posted to this school soon after completing their studies at various teachers' colleges and universities in Tanzania.

"Bondeni" School

Bondeni School was situated in the Mahenge ward of the Kilolo district; the distance from the main down in the district to the school was more than 120 kilometres. The school was named after the river which ran near the school to later join the Great Ruaha River, which acts as a boundary between the Iringa and Morogoro regions. On the eastern side, the Udzungwa game reserve bordered the school. The division and the ward where this school was situated had semi-desert climatic conditions; thus most staple crops were grown on irrigated land using the river which ran through the valley. The main crops grown were tomatoes, onions, beans and groundnuts. However, the survival of these crops required great care and security efforts, because they were attacked by gorillas and monkeys migrating from the game reserve to the division in search of food. The area was dominated by three main ethnic groups – the Hehe, Sagara and Maasai. The Sagara and Maasai were ethnic groups originating in the Morogoro and Arusha regions. Traditionally, the Maasai were nomadic pastoralists who migrated with their cattle in search of water and pasture land. The majority of the Sagara were agriculturalists, whose culture emphasised activities such as dancing. Bondeni School received students from these three ethnic groups.

This school was a co-educational, ordinary-level school established in 2005. The school had 364 students, of whom 191 were males and 173 were females. The total

number of teachers in this school was 19. Of the 19 teachers, ten had diploma qualifications and nine had bachelor's degree qualifications. Like Nyikani School, Bondeni School had demonstrated a dramatic decline in student performance over the previous decade. In 2009 and 2010 the rank of the school was 133 out of 136 and 172 out of 181 respectively. In 2011 the rank was 183 out of 188; 2012, 187 out of 207; and 2013, 104 out of 124, which was a slight improvement.

In Bondeni School, 13 teachers completed the questionnaire (see Appendix 15). Additionally, two different groups of teachers participated in the individual and the group interviews respectively. Table 3.4 below presents the demographic information of these teachers.

Table 3.4: Bondeni School interview participants

Name	Nature of dialogue	Gender	Subject (s)	Years of service	Teaching qualifications
Ngoma	Individual Interview (IT12)	Male	English	34	Diploma
Mhidze	Individual Interview (IT13)	Male	Kiswahili	10	Bachelor's degree
Zaituni	Individual Interview (IT14)	Female	English	13	Diploma
Nditi	Focus Group (FG4)	Male	History	3	Bachelor's degree
Hongoli	Focus Group (FG4)	Female	Civics	2	Diploma
Mwamwezi	Focus Group (FG4)	Female	Chemistry and Biology	2	Diploma
Kibiki	Focus Group (FG4)	Male	Mathematics	3	Bachelor's degree

Ngoma was the headmaster of Bondeni School and had a diploma in Education. Prior to his appointment to the school, Ngoma taught for many years at a public secondary school located in the Iringa Municipality. After the inauguration of the government's secondary education expansion policy, he was appointed to be the head of one of the community secondary schools located in this Municipality. However, due to the rapid increase in schools being built in other districts in the region, Ngoma was transferred to Bondeni School to perform the same role. Mhidze and Zaituni were posted in this school after the successful completion of their undergraduate and diploma studies respectively. Similarly, Nditi, Hongoli, Mwamwezi and Kibiki were posted to this school soon after completing their studies at various teachers' colleges and universities in Tanzania.

3.3. Gaining access to the schools and participants

Because secondary schools in Tanzania are under the local authority's management and control, before approaching a school I sought permission from the District Executive Directors (DEDs), who were in charge of these schools. These directors were given an introductory letter and information sheet (see Appendix 1), which among other things described the duration of the study, selection criteria of teacher participants and approximate time for interviews and completing questionnaires. The letter and information sheet also highlighted the rights of the participants, data-gathering procedures and ethical concerns around the study. After reading the letter and information sheet, the DEDs signed the consent forms (see Appendix 2) indicating their agreement for me to conduct research in their districts.

Upon arrival at a potential school, I also reported to the head of the school and provided him or her with an introductory letter and information sheet (see Appendix 3) and a copy of the consent form (see Appendix 4). If the head of a school volunteered to participate in the study, I then asked him or her to arrange, at a convenient time, a short meeting of all the teachers for introductory purposes. During this meeting, the introductory letter (see Appendix 5) and consent forms (see Appendix 6) were distributed to the teachers for them to decide if they would like to participate in the study. Only teachers who returned a signed consent form were allowed to participate in my study, and suitable time slots to interview and administer questionnaires were negotiated (see below).

3.4. Data collection instruments

With a mixed method approach, it is appropriate to use a range of data collection tools. This section describes the tools that were used for data-gathering. The selection of these tools also took into account ethical and trustworthiness concerns in order to avoid study biases and enhance the quality of data (Lauer, 2006). I collected data through the use of focus group interviews, one-to-one (individual) interviews, documentary reviews and questionnaires. As noted above (see Section 3.1), I anticipated that the utilisation of these multiple data collection sources would help me to understand the complexities of the impact of the expansion policy and maximise the validity and reliability of my findings (Kervin et al., 2006).

3.4.1. Focus group interviews

Principally, qualitative researchers gather descriptive information drawing on participants' perspectives to further their understanding of the phenomena under exploration (Mutch, 2013; Walliman, 2006). Thus, in an attempt to obtain quality information so as to enhance the study objectives, I conducted focus group interviews with teachers from the sampled schools. There is no consensus among researchers about the optimal number of people required to make a coherent group that can provide rich information about a phenomenon. While Silverman (2000), for example, suggests four to eight for an ideal group, Cohen, Manion, and Morrison (2000) propose that a group between four and twelve people allows all respondents an opportunity to interact. For the purpose of this study, however, four teachers in each school were selected to engage in the focus group interviews. Since research evidence demonstrates that teachers' self-efficacy varies across subject areas of specialisation and gender (Pajares & Graham, 1999), two science and two humanities and social science teachers were selected to participate in the interview. Of the four teachers, two were male and the other two were female teachers.

I used a focus group interview schedule with questions (see Appendix 15) to facilitate an approach to the respondents in seeking their narratives about the issue. In this interview schedule, I did not include questions about the expansion policy specifically since the implementation of the policy was the actual *context* of my study. The policy implementation was not viewed as causally as *producing* the various impacts reported in my findings. Rather, the implementation process was a

major factor in producing the conditions within which these teachers were working. My use of focus group interviews acknowledged the fact that people are unique social beings expressing their reality in particular ways (Silverman, 2000). This means that some feel less confident with individual interviews but are happy and comfortable to share the conversation with others with whom they are already familiar. Focus group interviews enable similarities and differences in respondents' opinions and experiences to become apparent in the course of exchanges during conversation (Soklaridis, 2009). However, one of the disadvantages of focus group interviews is that respondents may be reluctant to share sensitive issues for fear of being reported to authorities by other group members. Therefore, it is important to conduct both focus group interviews as well as individual interviews to further explore any issues that respondents may have been reluctant to share publicly in focus group interviews (Soklaridis, 2009, p. 723). In my study, I started with focus group interviews, then followed up with individual interviews as I understood that the latter would allow me the opportunity to revisit specific key threads of the conversation that had ensued in the focus group interviews (see also Section 3.4.2).

It is possible that in the course of conversation members of a group will go off on different tangents. This may happen if the group is composed of friends or respondents who are socially very close to each other (Silverman, 2000). In order to avoid this situation, teachers from each school were purposively selected to participate in the focus group interviews. During the exercise, I also acted as a moderator and facilitator posing questions and ensuring that the dialogue remained focused. To do this, I regularly repeated the questions when needed, used appropriate facial expressions to communicate and to clarify points that were not clear (Kervin et al., 2006; Silverman, 2000). The effective use of this strategy helped me to ensure that a group was always active and my respondents were on the right track. I predicted that during the conversation some respondents would be likely to remain silent because their views might be different from those expressed by the majority of respondents in the group (Basit, 2010). To avoid this, I made it clear from the beginning that there were no right or wrong responses to the questions that would be asked. Respondents were encouraged to share their points of view, even if they differed from those of the majority.

To minimise dominance and bias that might arise in the group, my questioning and probing took a form of rotation. The aim of doing this was to ensure that every respondent was involved, and their ideas and experiences were clearly shared. The involvement of all respondents in the group would maximise evidence-gathering and enhance resultant findings (Kervin et al., 2006; Mutch, 2013). Most obviously, focus group interviews enabled me to identify the shared feelings and experiences of teachers about the implications of the government's secondary education expansion policy. I predicted that challenges and disagreements were likely to arise among teachers during the interview process. These controversies were, however, taken to be worthwhile in revealing the intensity of feelings, thus facilitating my understanding of the issue. I anticipated that the respondents' similarities and differences in opinions and experiences would emerge through this group dialogue (Cohen et al., 2000; Soklaridis, 2009).

In order to improve the accuracy of the data, I also used tape recordings. While the interviews were recorded, I also listed key points as a way of stimulating my own thinking and understanding about the issues at hand. Following each session, I shared interview transcripts with my respondents so as to determine accuracy. In this process, respondents were given the chance to review their responses and make comments (Kervin et al., 2006). This practice allowed them to add, delete or clarify any points in the transcript. I was also conscious of the fact that focus group interviews on their own would not capture all intended information owing to circumstances that might limit some of the respondents from sharing their experiences and opinions. Therefore, at the end of each focus group conversation, respondents were invited to come and offer additional thoughts or an idea that had been overlooked during the conversation.

For the purpose of strengthening mutual understanding in terms of communication (Silverman, 2000), participants and I negotiated the language to be used in our dialogue. This was prompted by the fact that some teachers in Tanzania felt more comfortable expressing their experiences in Kiswahili (the national language) while others were interested in doing so in English (the medium of instruction in secondary schools). However, I anticipated that during the course of the focus group conversation, code-switching would be inevitable because it was likely that some respondents would wish to use alternative languages for the purpose of emphasising

and clarifying their points of view. Since my study intended to capture detailed understandings and insights, I did not interrupt my respondents when they suddenly switched languages. After the dialogue, the data gathered through the use of Kiswahili language were transcribed in Kiswahili, and, similarly, the data gathered through English were transcribed in English. Any instances of code-switching were transcribed accordingly. Finally, all data gathered through the use of Kiswahili (which was roughly 75% of this dataset) were translated into English by a professional translator before actual analysis took place. Since I was the one who conducted the focus groups with the teachers, where the translation had skewed the meanings of teachers' responses made in their home language, I adjusted or corrected it.

3.4.2. Individual interviews

After the focus group interviews, there were one-to-one interviews with the head of school and at least two teachers from each secondary school. Of the two or more teachers selected from each school, one at least was male and one at least was female. Teachers with at least ten years teaching experience were selected for interview, as this ensured that most of the teachers I interviewed were employed before or during the initiation of the government's secondary education expansion policy. For example, at Mafanikio School, I interviewed a female teacher with ten years of service, and two male teachers with 11 and 25 years of service respectively. Similarly, at Chuoni School, I interviewed a female teacher with ten years of service, and two male teachers, one with 13 and the other 33 years of teaching experience. At Nyikani School, I interviewed a female teacher with ten years of service, and a male teacher with 16 years of teaching experience. At Bondeni School, I interviewed a female and a male teacher with 13 and ten years of teaching experience respectively.

Such individuals were seen as a rich primary source of information on the policy implementation and its effects on efficacy beliefs of teachers. I interviewed some teachers on the assumption that some information might have been left out during the focus group dialogue. Some focus-group participants appeared to be reluctant to broach sensitive issues in dialogue with others for fear of being reported to the authorities by other members in a group. However, one-to-one interviews gave a participant the freedom to articulate his or her feelings and life experiences

(Silverman, 2000) about secondary education expansion and its impacts on effective teaching and learning.

I also set out to obtain information from the heads of the sampled secondary schools, because they are the ones who establish performance expectations of teachers by setting school strategies. These heads of schools were able to provide information about teachers and the school as far as policy implications were concerned. The data elicited from these respondents enabled me to compare and contrast the situation as it impacted on various teachers and schools and hence build up a complex picture of the phenomenon.

As with the focus group interviews, I used a semi-structured interview schedule (see appendices 11 and 12) when eliciting information from respondents in order to get detailed accounts of teacher experiences regarding policy effects on the efficacy beliefs of teachers. The schedule helped me ask similar questions of all teachers so as to make the data-gathering exercise more systematic. This, in turn, simplified the data-coding process, analysis, discussion and interpretation. Kervin et al. (2006) maintain that good interviews are those which allow respondents to freely express their points of view. Thus, before starting the interview, I had a short introductory meeting with my respondents in order to build mutual understanding, reduce social distance and enable the respondents to feel relaxed in the session. As a researcher I understood that there is a possibility that some respondents might misinterpret questions (Silverman, 2000; Wiersman, 1986). Where I observed this happening, I reframed my questions to ensure better understanding.

It is clear that an individual interview can be susceptible to subjectivity and bias resulting from the researcher's preconceived expectations (Cohen et al., 2000; Suter, 2006). Since the focus of qualitative research is on individual meaning, information from the respondents is regarded as first-hand information. In order to accomplish this, my respondents were given enough time (around 60 to 80 minutes) to share their perceptions, experiences and opinions (Cresswell, 2009). Bogdan and Biklen (1992) insist that "good interviews produce rich data filled with words that reveal the respondents' perspectives" (as cited in Kervin et al., 2006, p. 97). Therefore, I relied upon the data elicited from respondents as a means of understanding their social worlds and their experiences within it.

In the data collection process I anticipated that some respondents would not respond to my questions and might adopt avoidance mechanisms because of different levels of understanding (Bordens & Abbott, 2008; Cohen et al., 2000). In addressing this concern, I clarified my questions in a respectful manner in order to avoid the results being negatively affected. Also, I was aware that an inappropriate manner of questioning could compromise the quality of responses (Cates, 1985). In my study I attempted to present my questions clearly and prompted interviewees to elaborate on their responses. During the interview session I started by asking my respondents straightforward questions and then proceeded to more difficult ones; embarrassing and awkward questions were avoided (Soklaridis, 2009).

As with the focus group, I used tape recordings in gathering my data. Following each session, I shared interview transcripts with respondents so as to ensure their accuracy. In this process, respondents were given the chance to review their responses and make comments (Kervin et al., 2006). Also, after the interview respondents had the opportunity to come and provide additional information that had been overlooked during the conversation. As with the focus group, the language used in the conversation (Kiswahili or English) was negotiated between the respondents and myself and the transcription was done in accordance with the language used by the respondents. In this case, 12 (86%) and 2 (14%) of teachers who participated in individual interviews opted to express their feelings and experiences through the use of Kiswahili and English respectively.

3.4.3. Questionnaires

A questionnaire is a useful tool in determining the characteristics of a large range of respondents in relation to specific matters (Balnaves & Caputi, 2001; Bordens & Abbott, 2008; Singh, 2007). In my study Bandura's self-efficacy scale (Bandura, 2009) (see Appendix 14) was adapted and administered to all teachers in each sampled school so as to measure their efficacy beliefs at the time of the research study which took place ten years after the implementation of the expansion policy began. This scale measured the degree to which teachers believed they could influence effective student learning and achieve school goals. Instructional and disciplinary efficacy as well as efficacy to influence decision-making and school resources were also measured using the same scale. In addition, the scale measured

the degree to which teachers believed they could create a positive school climate and influence parental and community involvement.

Bandura's self-efficacy scale was developed with reference to western/developed contexts, which are quite different from those in the non-western world (Gecas, 1989). Since I was aware that Bandura's scale was inadequate in its not being cultural/contextual specific, I developed a scale that was more contextually applicable to the Tanzanian context in order to better illuminate the phenomenon under investigation. Therefore, Bandura's scale was accompanied with another questionnaire containing a Likert scale, which was designed to examine how teachers felt about the impact of changes resulting from the government's secondary education expansion policy. I anticipated that these teachers' feelings would have implications for view of themselves as professionals, and would also impact on their self-efficacy.

I believed it was possible that some teachers would disclose in the context of a questionnaire sensitive opinions that they might not necessarily broach in face-to-face encounters (Gillham, 2000). Partially open-ended questions were included in the questionnaire with a Likert scale in order to allow my respondents to provide additional ideas and experiences about the secondary education expansion policy and its implications for their sense of efficacy beliefs. Questionnaires were administered only to teachers who were willing and interested to participate. Out of a total of 69 teachers who completed the questionnaire, 25 (36.2%) were from Mafanikio School, 15 (21.7%) were from Chuoni School, 16 (23.2%) were from Nyikani School, and 13 (18.8%) were from Bondeni School.

Before administering the questionnaires I established a rapport with the teachers by describing the importance of the study and encouraging them to positively respond to the exercise. I was also on hand to answer any questions that respondents had along the way in an endeavour to assist with the completion of items in their questionnaires. While some argue that questionnaires play a subsidiary role in qualitative studies, others such as Wallen and Fraenkel (2001) declare that it is possible for a researcher to make use of questionnaires or tests in a qualitative study because they can help develop understanding of the life experiences of the respondents within a short period of time. Thus, questionnaires with a Likert scale

were used to support the qualitative study findings that were gathered through face-to-face interviews.

3.4.4. Documentary reviews

Hancock and Algozzine (2006) and Smith (2008) point out that when secondary sources are combined with information from interviews they can offer a useful overview of the issues under investigation. My study gathered data through the use of documentary reviews in order to gain and broaden an overall understanding about the effects of the government's secondary education expansion policy in relation to the efficacy of teachers. During the face-to-face dialogue I asked teachers if they were willing to provide access to me for any documents and reports such as records of examinations, syllabus documents, lesson plans, schemes of work, written evaluations of teachers and professional goal-setting files. I also asked for access to any confidential reports that teachers were aware of which had been written about them as teachers and could have been an influence on their efficacy beliefs. After receiving these documents I discussed with participants how confident they felt about teaching and learning processes. While some heads of schools were reluctant to provide professional documents about individual teachers for fear that they might be used beyond the study, I assured them that these documents were for the sole purpose of academic quality improvement. I expected that the effective use of these records and documents would help me to understand more about the practices and experiences of teachers as well as the schools involved. This, in turn, would not only facilitate my understanding but also assist me to make valid claims about the effects of the policy on schools and teachers.

3.5. Piloting the interview prompts and questionnaires

The quality and rigour of qualitative research depends on how well the data gathering tools are designed (Cresswell, 2008; Gall et al., 2007; Walliman, 2006). In order to maximise the credibility of my study, the interview prompts were piloted with two doctoral students from Tanzania studying at the University of Waikato (New Zealand). These students were selected for this exercise because they were familiar with the context and research methodologies of my project. During the course of the piloting the interviews, my interviewees were given the opportunity to critique and seek clarification of my questions. At the end of the conversation

each interviewee was asked to comment on the interview schedule and my questioning/prompting techniques. They were also asked to reflect on the experience of being interviewed and how they interpreted the questions. In addition to identifying potentially ambiguous questions and determining an appropriate sequencing of questions, the piloted interviews assisted me in estimating the duration of interviews (Basit, 2010; Corbetta, 2003).

As a consequence of this procedure, I noted that the interview questions were numerous and it was not ideal for all of them to be used in a single interview because respondents were likely to become tired. This situation prompted me to modify and revise my strategies. Thus, I divided the interview schedule into sections so that at least half my questions could be raised in one session and the other half covered in a second session with the interviewee (see Appendices 11, 12 and 13). This revision aimed to avoid fatigue on the part of my interviewees. None of the interview questions, as such, were eliminated, but unclear questions were refined, and I included one further question, which enabled my respondents to add anything else they wished to share which had not been covered in the course of the conversation.

Like the interview schedule, the questionnaire was also piloted with the same respondents with the “specific intention of gaining feedback from the respondents concerning their interpretation of the questions” (Brown & Dowling, 1998, p. 67). The respondents filled in the questionnaire in my absence, and brought it back after completion. In the course of completing the questionnaire, my respondents were requested to mark and note problematic items for further amendment. Each respondent was also asked to record the estimated time he or she took to complete the questionnaire. After this exercise, the respondents and I met to discuss the comments. The time taken to complete the questionnaire by each respondent was similar, with one taking 40 minutes and the other taking 45 minutes.

The respondents suggested including demographic information such as number of years teaching (teaching experience) and teaching qualifications in the questionnaire. Given the fact that such factors might influence the self-efficacy of teachers, collecting this information was important for revealing potentially significant patterns across these demographic variables. Generally, this trial-run enabled me to identify problematically phrased questions which required further

refinement before the actual data gathering process commenced (Brown & Dowling, 1998; Lauer, 2006; Walliman, 2006). While some items in Bandura's self-efficacy scale were reframed to reflect the Tanzanian context, one significant question, which provided my respondents with the opportunity to offer additional comments was added to the schedule (see Appendix 14). The respondents also offered suggestions in relation to revising the order of my questions, but neither of them identified any questions that were awkwardly worded.

3.6. Challenges that arose in the course of study and the strategies taken to tackle them

One of the critical challenges many qualitative and quantitative investigators encounter in their research journey of data collection is gaining access to the research site (Monahan & Fisher, 2015; Shenton & Hayter, 2004). Similarly, in my own study, despite the overall success in data-gathering, the exercise was not as smooth as expected because a number of challenges emerged before and during the course of the project. Even though most district education officials in the region clearly understood and adhered to their district executive directors' instructions, which required them to write an introductory letter to the heads of schools, one official was reluctant to do so. This official did not recognise the introductory letter from me and instead demanded that the introductory, permission-seeking letter be written by the institution itself (the University of Waikato). It was perhaps the first time this official had encountered such a letter. It is normal practice for Tanzanian university students or anybody who intends to carry out study to have an introductory letter from a respective institution or an organisation. To address this concern, I advised the official that some procedures for undertaking research are institutionally specific. I explained that it is a rule for a student pursuing doctoral studies and/or research degrees at my institution to write his or her own permission-seeking letter. I further emphasised that this letter would not become legal unless approved by the institution's ethics committee. These arguments convinced the official, who immediately wrote an introductory letter to the heads of schools.

The research literature suggests that qualitative researchers should be aware of the likely disruption which may occur during interviewing and how to address it (Cresswell, 2009). In my study, the individual dialogue with respondents was regularly interrupted by mobile phone calls. When this happened, the dialogue was

stopped until the respondent had completed the call and was ready to proceed. The same occurred during the focus group interview. I believed that if I proceeded with the conversation, the respondent phoning would lose direction and thus fail to offer pertinent ideas. Another problem was that prior to gathering data I speculated that the average number of teachers in secondary schools in Tanzania was about 30. Based on this average, this study was expected to involve an approximate number of 120 teachers from the sampled schools. However, this prediction was wrong, because some schools had a larger number of teachers than others. Although some schools had a large number of teachers, during data collection some were on study leave in different teachers' colleges and universities around Tanzania.

Peersman (2014) suggests that if some respondents are unavailable at the time of data collection, a researcher may use telephone interviewing to obtain the required information. Gillham (2000), however, argues that although telephone interviewing is a possible alternative, participants' availability can be problematic as they may have their own commitments. Similarly, in my study, I anticipated that teachers who were on study leave would be busy with their studies, and thus would not want to be bothered. This situation, therefore, led me to gather data only from available teachers in the sampled schools. In this regard, only 99 teachers took part in my study. Thirty of them were interviewed and completed the questionnaire, while the others filled in the questionnaires only.

3.7. Forms of analysis

Because my study utilised a mixed methods approach, data were analysed both qualitatively and quantitatively. I discuss this below.

3.7.1. Qualitative data analysis

In qualitative research there is no clear line of demarcation between data collection and analysis. Unlike quantitative studies, qualitative data analysis practices proceed simultaneously with data collection rather than occurring at the end of the collection period (Cresswell, 2009; Maykut & Morehouse, 1994; Wallen & Fraenkel, 2001; Yin, 2011). Therefore, after each individual and focus group interview I spent a few minutes reflecting on the responses provided by my respondents. This helped me as a researcher to identify the merit of my questioning strategies and to understand the extent to which the responses were consistent with my research objectives.

Noting difficulties assisted me to improve my questioning strategies with other respondents who were asked similar questions. After completion of the data collection, taped interviews and field notes were transcribed in order to facilitate the coding process and evidential review (Hancock & Algozzine, 2006; MacMillan & Schumacher, 2010).

Even though qualitative data analysis is eclectic in nature (Cresswell, 2009; MacMillan & Schumacher, 1993), my study adopted the form of an inductive analytical procedure. The procedure was deemed appropriate because it allowed me as researcher to examine carefully the collected data from the interviewees' social-world perspectives (Lichtman, 2006). The process of data analysis proceeded in an orderly manner as proposed by Elo and Kyngas (2007) and Lates (2008). Initially, I intensively read each transcript over and over again so as to gain familiarity with and make sense of the data. This process led to an open coding process where I "identified specific segments of information" (Soklaridis, 2009, p. 728).

Bassett (2004) and Cohen et al. (2011) point out that open coding can be performed in different ways: phrase by phrase, sentence by sentence, paragraph by paragraph and line by line. In my analysis, however, I did not code everything in the interview transcripts, since I wanted to reduce the possibility of confusion arising from having numerous codes (Hatch, 2002; Seidman, 2006; Walliman, 2006). Coding in my analysis was confined to data which reflected how teachers viewed their professional lives as a result of the expansion plan enactment. All codes were listed in the margins of the transcripts. For example, the developed initial code for teachers' narratives about whether they taught one or two subjects, small or big classes, many streams or a single stream was "Teaching workload (TW)". Data in relation to salary advancement, teaching incentives, fringe benefits and career promotion were coded "Teaching rewards (TR)". Further specific examples of the initial coding process data are provided in Appendix 18. Once codes were created, I categorised my data into groups of themes while focusing on the research questions. The purpose of grouping the data was to minimise the number of categories so that it became manageable (Elo & Kyngas, 2007).

After grouping, I continually revisited the data while writing down reflections about it. This process helped me to further generate subthemes, as well as identify unique

topics. Finally, I grouped together linked data-chunks under subthemes. This process of classification continued until the bulk of the data fitted into the emergent categories (Kervin et al., 2006; MacMillan & Schumacher, 1993). Next, from these emergent categories I sequenced my themes in a logical order so as to allow for the sound linkage of ideas. This exercise was followed by the construction of a narrative account and interpretation of my findings. Once the interpretation of data was undertaken, I discussed my findings while drawing on the theoretical literature as well as the conceptual framework which underpinned my research project (Lankshear & Knobel, 2004; Lates, 2008).

3.7.2. Quantitative data analysis

The data gathered through the use of questionnaires were analysed via the Statistical Package for Social Sciences Software (SPSS) before being tabulated, graphed and analysed in ways explained below.

As stated earlier, the questionnaire completed by the participants had two parts. The first part contained items constructed specifically to help elucidate how the participant teachers felt as a consequence of secondary education expansion. In this part of the questionnaire, teachers had to tick the relative strength of their opinions on a Likert scale in five unit intervals ranging from 5, “strongly agree”; 4, “agree”; 3, “neutral”; 2, “disagree”; to 1, “strongly disagree”. The second part consisted of a teacher efficacy scale (based on Bandura, 2009), which measured participants’ self-efficacy beliefs. Unlike the former scale, the latter required teachers to indicate their perception of the strength of an item’s influence on their efficacy on a five-interval scale ranging from 1, “nothing”; 2, “very little”; 3, “some influence”; 4, “quite a bit” to 5, “a great deal” (see Appendix 14).

In order to simplify the analysis, the SPSS-entered data were subjected to factor analysis. Factor analysis is an analytical strategy where a number of related homogeneous items are grouped together into a limited number of dimensions (Ainley, 2005; Hopkins, 1976; Johnson & Christensen, 2008; Mouly, 1963; Peat, Mellis, Williams, & Xuan, 2001; Williams, Onsmann, & Brown, 2010). This practice serves as a factorial purifying mechanism for a range of overlapping constructed measures of human behaviour, and helps to optimise the researcher’s time and effort. Two main approaches to factor analysis are commonly discussed in the research

literature: exploratory and confirmatory (Ainley, 2005; Cresswell, 2009; Singh, 2007; Thompson, 2004; Wiersman, 1986). While exploratory factor analysis is used to explore the relationship which exists between variables so as to determine underlying patterns, confirmatory factor analysis is used to test the hypotheses based on the latter. This study employed exploratory factor analysis only. Mouly (1963) emphasises that “the purpose of factor analysis is neither to test the significance nor to predict the occurrence of phenomena, but to analyse the factorial composition of a mass of data” (p. 307). Thus, my study used exploratory factor analysis in order to explore a range of items for patterns and hence reduce them to fewer factors that would be easier to manage and interpret (Brown, 2009; Choi & Jang, 2014; Ferrando & Lorenzo-Seva, 2000).

Before undertaking an analysis of the factors revealed in Likert scale data, the questionnaire items had to comply with Kaiser-Meyer-Olkin (KMO) and Bartlett’s test of sphericity. The measure and the test were utilised in order to determine whether or not my questionnaire items were suitable for factor analysis. The KMO index ranging from 0.5 or greater, and significant value of Bartlett’s test of sphericity at $p < 0.01$ are considered suitable for factor analysis (Bandalos & Finney, 2010; Dziuban & Shirkey, 1974; Fabrigar, Wegener, MacCallum, & Strahan, 1999). The SPSS software was used for the manipulation and calculation of both the frequencies and percentages. Vandestoepe and Johnson (2009) assert that frequencies and percentages play a significant role in studies which require the researcher to provide descriptive comparable insights and information about the phenomena under study. My study drew on the computed frequencies and percentages to compare the participant responses in relation to the demographic information collected. Essentially, both the frequencies and the percentages served to shed light on findings generated by the study’s qualitative data. Quantitative findings are presented in the next chapter (Chapter 4).

3.8. Ethical issues

As a researcher I adhered to a range of ethical requirements with regard to data collection, analysis and interpretation as well as the writing and dissemination of findings. Before conducting the study, I received the approval of the University of Waikato’s Ethics Committee (see Appendix 9). Further permission was solicited

from the District Executive Directors as well as the heads of the sampled schools before approaching any respondent. As previously mentioned, I briefly explained the purpose of my interviews to my respondents in an effort to develop their trust. In relation to this, I informed my respondents that like them, I had been a secondary school teacher for seven years and later became a teacher educator. In addition, I requested permission from heads of schools to participate in staff meetings and share ideas with teachers during their meal times. The aim of doing this was to reduce social distance so that my respondents regarded me as a colleague rather than an external interviewer. I also guaranteed my respondents that my doctorate would be beneficial to them (especially those who intended to upgrade their qualifications), their children and Tanzanian society in general.

To assure my respondents of the integrity of my study, I clearly and comprehensively defined its focus. Respondents were also informed that no one else would have access to the elicited data except my supervisory panel. After the briefing, the respondents were asked to read and sign a consent form before they engaged in dialogue with me. Respondents were allowed to withdraw any information they provided during the course of the interview without the need for justification.

I also made it clear that involvement in my research was voluntary and that respondents were free to end their participation at any time. In order to remain focused on the direction of the interview (Kervin et al., 2006; Ritchie & Lewis, 2003), I also sought the respondents' permission to record the information they provided during interviews, and assured them that their identities and that of their school would remain anonymous through the use of pseudonyms. Should any respondents refuse to be recorded, I was ready to take notes. In writing the thesis, I avoided the "use of language or words that are biased against persons because of sexual orientation, racial or ethnic group or disability" (Cresswell, 2009, p. 74).

3.8.1. The use of information

I made it clear to my participants that the elicited information would be used for a doctoral thesis at the University of Waikato. They were also informed that the findings might be used in scholarly publications and that the study results might be used for presentations such as seminars, workshops and conferences. However, I

emphasised that any use of the information beyond this study would require further consent from them.

3.8.2. Conflicts of interest

Throughout the entire course of this research, a professional relationship was established and maintained by me with all participants regardless of any common ethnic, cultural or previous professional links or friendships. All participants were treated with respect in an impartial way to enable neutrality. Although I had previous involvement with some potential participants during their years of pre-service teacher training, sufficient time had elapsed so that there was now adequate distance in terms of our respective affiliation for me to carry out this research without any conflict of interest.

3.8.3. Cultural and social considerations

Some Tanzanians tend to assume that a researcher has funds to facilitate the process. Thus, I predicted that some of the potential participants would be eager to know if they would be paid for their involvement. I therefore openly and honestly advised them from the beginning that no payment would be offered to any participant for being engaged in my study. In Tanzania, talking to a woman in a private space has the potential to be misinterpreted. To avoid this, individual interviews with female teachers took place in an open environment as a way of allowing other people to easily see what was going on. It is also culturally unacceptable in Tanzania for a male to shake hands with a Muslim female. Thus, during the course of my study, I avoided shaking hands with all female teachers.

3.9. A brief summary

This chapter has provided a justification for utilising a mixed-methods, case-study approach in a study aimed at developing an understanding the impact of the Tanzanian government's secondary education expansion policy on teachers' sense of efficacy. The validity and reliability of this study were enhanced in several ways. Some of these include: piloting the interview prompts and questionnaires; using interview questions to seek out participants' perspectives and experiences; appropriate probing; reviewing interview transcripts with respective participants; selecting an appropriate samples; triangulation of data; jotting down key ideas even when the interviews were recorded; and allowing an optimum duration for data

collection. These practices, together with the due diligence taken around a range of ethical issues, allowed me to obtain the findings which are presented in the following two chapters (i.e., Chapters 4 and 5).

CHAPTER 4: QUANTITATIVE FINDINGS

This chapter presents the findings that emerged from analysis of questionnaire data. In this questionnaire, teachers responded to items related to their professional efficacy beliefs and feelings, and how these might have been influenced by the government's secondary education expansion programme. In completing the questionnaires, teachers provided information on their subject area of specialisation, gender, years of teaching experience and teaching qualifications.

A total of 69 teachers from the selected schools completed the questionnaires. Of this number, 15 (21.7%) were science teachers and 54 (78.3%) were humanities and social science teachers. Those categorised as humanities and social science teachers were those who taught subjects such as History, English, Kiswahili, Geography, Civics and General Studies. There were 48 (69.6%) male teachers and 21 (30.4%) female teachers. The number of years of service of participating teachers ranged from one to 39. Forty-six (66.7%) teachers had taught one to nine years, 15 (21.7%) taught ten to 19 years, six (8.7%) taught 20 to 29 years, and two (2.9%) teachers fell in the range of 30 to 39 years. Teachers with a diploma, bachelor degree and master degree qualifications were 11 (15.9%), 54 (78.5%) and four (5.8%) respectively. The table below presents an overview of the teachers across all schools who participated by completing questionnaires.

Table 4.1: Teachers who participated in the questionnaire

Schools	Subject area		Gender		Years of service				Qualifications		
	Sciences	Humanities and social sciences	M	F	1 to 9	10 to 19	20 to 29	30 to 39	Diploma	Bachelor Degree	Masters Degree
Mafanikio	5	20	17	8	18	5	2	0	2	22	1
Chuoni	4	11	10	5	5	4	4	2	1	11	3
Nyikani	4	12	11	5	12	4	0	0	4	12	0
Bondeni	2	11	10	3	11	2	0	0	4	9	0
Total	15	54	48	21	46	15	6	2	11	54	4

Although the Likert scale questionnaire contained five open-ended prompts, this chapter will report only on findings from an analysis of closed items. An analysis of the open-ended prompts will be reported on in the qualitative findings. As mentioned earlier in the methodology chapter, the questionnaire was divided into two parts (questionnaire parts one and two). The findings emerging from an analysis of these two parts of the questionnaire were treated separately, as the following sections indicate.

4.1. Questionnaire part 1: Factor analysis summary

The aim of the first part of the questionnaire was to gain insights about how teachers felt as a consequence of the expansion of secondary education. To accomplish this, teachers rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) their degree of agreement/disagreement with each statement. Participants' responses were subsequently subjected to factor analysis aimed at identifying underlying factors with the purpose of establishing overarching themes. These themes were drawn on to enhance later discussion of how aspects of the teachers' work might affect their self-perceptions and ability to positively influence student learning.

Before an analysis of the Likert-scale data was undertaken, the questionnaire items had to comply with the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The measure and test were utilised in order to determine whether my questionnaire items were suitable for factor analysis or not (Field, 2000; Izquierdo, Olea, & Abad, 2014; Kaiser, 1974). Kaiser (1974) noted that a value greater than 0.5 is acceptable; values between 0.5 and 0.7 are mediocre; values between 0.7 and 0.8 are good; values between 0.8 and 0.9 are great; and values above 0.9 are superb. More specifically, Bartlett's test of sphericity at $p < 0.01$ suggests that there are some correlations between questionnaire items.

For my data, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.61, which is at the threshold of the recommended value, and Bartlett's test of sphericity was significant, $\chi^2(66) = 210.25$, $p < 0.01$. These numerical values confirmed that the questionnaire data were suitable for factor analysis. The diagonals of the anti-image correlation matrix were all over 0.5, supporting the inclusion of each item in the factor analysis. Finally, the communalities were all

above 0.3 (Gorsuch, 1974; Neill, 2008), further confirming that each item shared some common variance with other items. Given these overall indicators, the initial factor analysis was conducted with all 20 items.

The factor analysis began with data-screening in order to obtain items which could form suitable and well-structured factors (Cohen et al., 2011). As mentioned above, initially there were 20 questionnaire items but after the repeated iterations, only 12 items were retained for the factor analysis. The eight items removed had either loaded in more than one factor or had a communality value below 0.3. The 12 retained items produced five factors. These five factors were extracted using the principal-axis factoring technique, which provided the eigenvalues for each initial factor. The initial eigenvalues indicated that the first factor accounted for 27.2% of the total variance and the second factor 14.8%. The third, fourth and fifth factors accounted for 11.2%, 9.4% and 8.7% respectively. Overall, the five factors retained in the model accounted for 71.3% of the total variance. All extracted factors had eigenvalues above one (Ahn & Horenstein, 2013; Izquierdo et al., 2014).

Basically, in factor analysis, items should be loaded and distributed between and among different factors (Ahn & Horenstein, 2013; Basto & Pereira, 2012; Izquierdo et al., 2014; Reise, Waller, & Comrey, 2000; Thompson, 2004). To achieve this, a varimax rotation practice was carried out in order to obtain an ideal number of factors with a relatively equal balance of questionnaire items. Prior to rotation most items were loaded in the first factor, but after rotation the items were regrouped into five factors. Table 4.2 shows the loadings of items related to the five factors after varimax rotation.

Table 4.2: Questionnaire part 1 - Factor loadings after varimax rotation

Items	Factors				
	1	2	3	4	5
I have sufficient skills to produce meaningful student learning	0.681				
I possess enough subject knowledge to bring significant student learning	0.757				
I think teaching performance evaluation is important in improving teaching and learning	0.835				
I feel less comfortable teaching large classes		0.886			
I need more training to know how to deal with students		0.693			
My school has adequate resources to facilitate teaching and learning processes			0.765		
My head of school always observes classroom teaching and provides feedback			0.526		
School inspectors visit my school regularly and provide constructive feedback that enhance my teaching			0.793		
I feel less confident to influence effective learning in my class because of student discipline problems				0.782	
I feel exhausted with classroom teaching and other school activities				0.854	
I have always been promoted appropriately					0.88
My school creates an environment that is supportive and helpful to enable more successful teaching and learning					0.725

Following this varimax rotation, themes (labels) were developed that related to the specific items in each factor. Williams et al. (2010) point out that in factor analysis, labelling is a hypothetical and subjective process. They suggest that in order to provide a meaningful interpretation, at least two or three items must be loaded in a factor. In my analysis, each identified factor had at least two items, and thus qualified for labelling (see table 4.3). The first factor was labelled “Professional competence”. I viewed the three associated items as all related to teachers’ concerns

with their professional competence and teaching performance, in this case the domains of knowledge, skills and teacher performance evaluation. The second factor was named “Ease in dealing with students” because the associated items referred to teachers’ levels of confidence across diverse classroom settings.

The third factor was identified as “Resourcing and feedback support”. While the first item in this factor related to teachers’ views on the status of teaching and learning resources, the second and third items were about teaching observations. I was conscious that the role of heads of schools (school principals) and school inspectors is to observe teachers’ classroom practice and provide feedback on what they had observed to support teachers in their ongoing professional development. The fourth factor was named “Teaching morale”, because the associated items indicated how teachers felt when performing their professional duties in a variety of situations. Finally, the fifth factor was termed “Career and collegial support”. This label reflects how the government and schools respectively motivate and mutually work with teachers in order to enable them to progress their careers and their professional lives. Table 4.3 provides a summary of factored items and their specific labels.

Table 4.3: Questionnaire part 1 - Factorised items and their specific labels

Factors	Related items
Professional competence	<ol style="list-style-type: none">1. I have sufficient skills to produce meaningful student learning2. I possess enough knowledge to bring about significant student learning3. I think teaching performance evaluation is important in improving my teaching and learning
Ease in dealing with students	<ol style="list-style-type: none">1. I feel less comfortable when I teach large classes2. I need more training to know how to deal with students
Resourcing and feedback support	<ol style="list-style-type: none">1. My school has adequate resources to facilitate teaching and learning processes2. My head of school always observes classroom teaching and provide feedback3. School inspectors visit my school regularly and provide constructive feedback that enhance my teaching
Teaching morale	<ol style="list-style-type: none">1. I feel less confident to influence effective learning in my class because of student discipline problems2. I feel exhausted with classroom teaching and other school activities
Career and collegial support	<ol style="list-style-type: none">1. I have always promoted appropriately2. My school creates an environment that is supportive and helpful to enable more successful teaching and learning

It is important to note here that the items in factors one, three and five were phrased in positive terms, which mean that the higher the scores, the higher the results for teacher self-efficacy and vice versa. However, factors two and four operated in the opposite way because they were phrased in negative terms. To make these factors positively weighted, I reversed the scale loadings of the second and fourth factors

so that “strongly agree” scored 1, “agree” scored 2, “disagree” scored 4 and “strongly disagree” scored 5.

Thereafter, I analysed the items in each factor by using frequencies and percentages. I was aware that the chi-square test had the potential to assist me in testing whether or not the relationship between variables would be statistically significant (Gratton & Jones, 2004; Peers, 1996). In my analysis, however, chi-square was not employed because of two points raised by Sigh (2007). Firstly, Sigh emphasised that in order for chi-square to produce significant results, the number of respondents should be large enough and relatively equally distributed. The number of respondents who completed my questionnaires was small with some demographic categories of teachers limited only to specific schools. However, a range of different schools were involved in the study, and it is for this reason that the participants were treated altogether. Secondly, Sigh noted that “chi-square tests the underlying probabilities in each cell; and in cases where the expected frequencies are less than 5, it becomes very difficult to determine the underlying probabilities in each cell with precision” (p. 126). Many cells in my data had an expected count of less than 5. Therefore, the chi-square test was confirmed to be no longer valid.

4.1.1. Questionnaire part 1: Presentation and description of findings

This section presents findings on how teachers felt as a consequence of the government’s secondary education expansion policy. The statements with positive weightings are interpreted to mean that teachers had favourable feelings or beliefs towards the related issue or topic. Similarly, statements that were weighed negatively were taken to imply that teachers had unfavourable feelings or beliefs towards that particular issue (Anderson, 1988; Sari, Revilla, Krosnick, & Shaeffer, 2010). In many cases, during the analysis of evidence, I combined participants’ results if they indicated either positive or negative responses. In other words, “strongly agree” and “agree” were considered as “agree”, and “strongly disagree” and “disagree” were classified as “disagree”.

The findings reported on here are complemented by graphs and tables. The selection of the demographic category to be graphically displayed depended on either the content of the item itself or the identified differences between teacher categories. Based on these criteria, two major reasons influenced my decision to use graphs.

Firstly, I was conscious that some key issues related to certain items were reflected in specific demographics. For instance, I opted to display two graphs, one for *teaching experience* and the other for *teaching qualifications*, in the first item of factor five because of my own knowledge that teacher promotion in Tanzania is implemented on the basis of these two criteria. Secondly, I also understood that graphs which show significantly different ratings between teacher categories would assist me to argue on the basis of these noted differences during the discussion of these findings in chapter 6. All tables related to this section are in appendix 16.

Factor 1: Professional competence

As discussed previously, factor one had three items. The first item indicated how teachers rated their skills to influence learning. On the basis of subject area of specialisation, 12 (80%) of the science teachers and 46 (85%) of the humanities and social sciences teachers felt that they had sufficient skills to produce meaningful student learning. In terms of gender and year of service, 40 (83%) of the male teachers, 18 (86%) of the female teachers, 39 (85%) teachers with one to nine years of service, 12 (80%) of those with ten to 19 years of service and six (100%) teachers with 20 to 29 years of service demonstrated the same sentiment. With regard to teaching qualifications, ten (91%) of the teachers with diploma qualifications, 48 (90%) of those with bachelor degree qualifications and three (75%) of the teachers with master degree qualifications also indicated positively that they had skills to influence learning. For this item, only a few teachers rated their feelings as “neutral”, “disagree” or “strongly disagree”.

The second item asked teachers to self-rate in terms of their level of subject knowledge in bringing about significant student learning. For this item, 12 (80%) of the science teachers, 49 (91%) of the humanities and social science teachers, 42 (87%) of the male teachers and 19 (91%) of the female teachers either strongly agreed or agreed that they possessed adequate knowledge. Whilst 40 (87%), 14 (93%) and six (100%) of the teachers with one to nine, ten to 19 and 20 to 29 years of service respectively believed that they had sufficient subject knowledge, the two teachers with 30 to 39 years of service differed in their feelings. One of the teachers felt strongly satisfied with the subject knowledge they had, while the other was dissatisfied with his level of subject knowledge. Regarding levels of education, ten (91%) teachers with diploma qualifications, 48 (89%) teachers with bachelor degree

qualifications and three (75%) teachers with master degree qualifications rated themselves positively. The few teachers across the various demographics who felt discontented and uncertain of their subject knowledge appeared to consider that learning is a lifelong process in the sense that teachers often continue to learn as they interact with their colleagues and students.

The third item reflected teachers' opinions about whether teaching performance evaluation was important in improving teaching and learning. Fourteen (93%) of the science teachers and 51 (95%) of the humanities and social sciences teachers indicated that teaching performance evaluation is significant in enhancing teaching and learning. In term of gender, 44 (92%) of the male teachers and 21 (100%) of the female teachers positively perceived that such evaluation was important in improving teaching and learning. With regard to years of service, 44 (96%), 14 (93%) and six (100%) of the teachers with one to nine, ten to 19 and 20 to 29 years of teaching experience respectively demonstrated the same positive thoughts. However, the two teachers with 30 to 39 years of service differed in their ratings. One of the two "strongly agreed" that teaching performance is important in improving teaching and learning, while the other "strongly disagreed". In reference to educational background, ten (91%), 52 (96%) and three (75%) of the teachers with diploma, bachelors degree and masters degree qualifications respectively thought that teaching performance evaluation was important in improving teaching and learning. Overall, these feelings suggest that although the teachers felt they had knowledge and skills they still believed that teaching performance evaluation was important in improving their professional competence.

Factor 2: Ease in dealing with students

This factor incorporated two items. The first item indicated the degree of comfort teachers felt when teaching large classes. In relation to subject area of specialization and or gender, nine (60%) of the science teachers, 36 (67%) of the humanities and social sciences teachers, 33 (69%) of the male teachers and 12 (57%) of the female teachers indicated that they felt uncomfortable when teaching in overcrowded classes. Similarly, 26 (56%) of those teachers with one to nine years of service, 13 (87%) of the teachers with ten to 19 years of service and five (83%) of the teachers with 20 to 29 years of service respectively had the same sentiment. In contrast, of the two teachers with 30 to 39 years of service, one felt comfortable teaching large

classes, while the other was uncomfortable. Seven (64%) of the teachers with diploma qualifications, 35 (65%) of the teachers with bachelor degree qualifications and two (50%) of the teachers with master degree qualifications felt uncomfortable when teaching large classes. It appears from these negative responses that for the majority of teachers, large class size was a factor negatively impacting on their self-efficacy.

The second item in this factor explored the extent to which teachers saw themselves as needing more training on how to deal with students. What is interesting from the data is that 12 (80%) of the science teachers and 39 (72%) of the humanities and social sciences teachers rated their belief that they needed such training as either “strongly agree” or “agree”. Similar feelings were also evident in relation to gender and years of service. In terms of gender, 36 (75%) of the male teachers and 15 (71%) of the female teachers expressed a desire for more training in dealing with students. In terms of years of service, the figures were: 31 (67%) of the teachers with under ten years of service; 13 (87%) of the teachers with ten to 19 years of service; and six (100%) of the teachers with 20 to 29 years of service. Of the two teachers with 30 to 39 years of service, one strongly agreed that he needed more training to know how to deal with students, while the other strongly disagreed. Teachers with diploma, bachelors degree and masters degree qualifications who felt they needed such training were eight (73%), 23 (74%) and three (75%) respectively. Such ratings indicate that most teachers identified a need for further training as a way of building confidence in dealing with students.

Factor 3: Resourcing and feedback support

This factor comprised three items. The first item sought the opinions of teachers about the adequacy of teaching and learning resources in their schools. While eight (53%) of the science teachers felt that their schools had enough teaching and learning resources, only 20 (37%) of the humanities and social sciences teachers responded positively to this item. Possible reasons for this discrepancy will be provided in Chapter 6. The results also identified a gender-based variation in responses. Twenty-two (46%) of the male teachers were happy with the school resourcing, while 12 (57%) of the female teachers had neutral feelings. Although nine (60%) of the teachers with ten to 19 years of service indicated that there were sufficient school resources, 21 (46%) of the teachers with one to nine years of

service and four (67%) of those with 20 to 29 years of service were undecided. Of the two teachers with 30 to 39 years of service, one felt satisfied with school resourcing, while the other was dissatisfied. Whilst three (75%) of the teachers with masters degree qualifications believed that school resourcing was adequate, five (46%) and 23 (42%) of the teachers with diploma and bachelors degree qualifications respectively felt neutral. The topic of resourcing will be addressed further in Chapter 5, which presents findings based on qualitative data. Figure 4.1 below demonstrates how science, and humanities and social science teachers expressed their opinions.

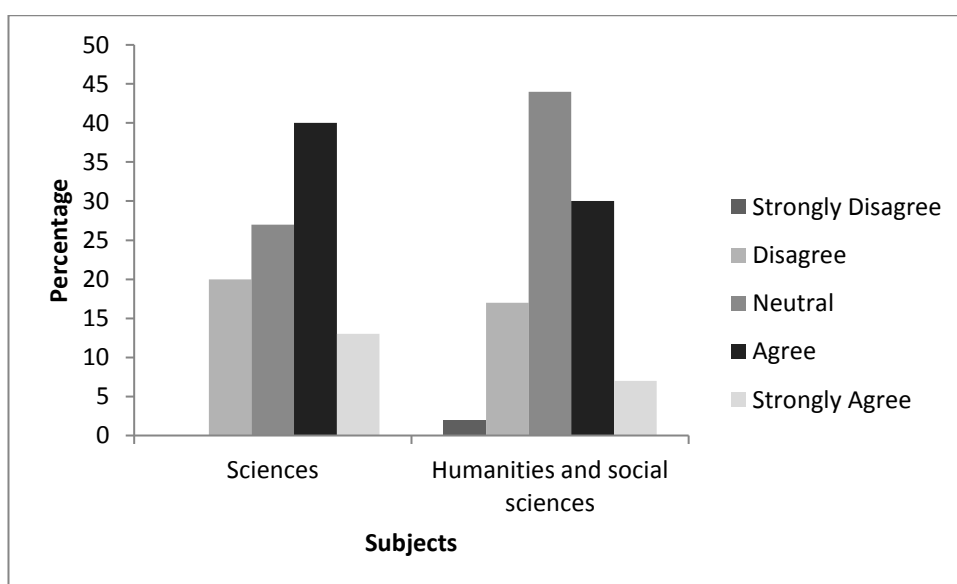


Figure 4.1: Teachers' rating differences by subject area of specialization

The second item sought to identify teachers' attitudes towards the frequency with which the heads of schools observed their classroom teaching and provided feedback. A total of 37 (69%) humanities and social sciences teachers and eight (53%) science teachers positively reported that their heads of schools regularly observed them and provided feedback concerning their teaching effectiveness. Twenty-nine (61%) male teachers and 16 (76%) female teachers had the same opinion. While three (50%) of the teachers with 20 to 29 years of service felt neutral about the regularity of their heads of schools observing their classroom teaching and providing feedback, 33 (72%) of the teachers with less than ten years of service

and nine (60%) of the teachers with ten to 19 years of service were content with their situation. Of the two teachers with 30 to 39 years of service, one felt ambivalent, while the other was satisfied. Eight (73%), 34 (63%) and three (75%) teachers with diploma, bachelors degree and masters degree qualifications respectively indicated positively that their heads of schools regularly observed them and provided feedback. These findings show that ratings tended to differ according to teaching experience. The more experienced teachers were less happy with the frequency that heads of schools observed their teaching and provided feedback compared to their less experienced colleagues (see figure 4.2). An implication of this contrasting perspective will be discussed in Chapter 6. Figure 4.2 provides a graphic representation of how teachers with different levels of teaching experience self-rated with regard to this item.

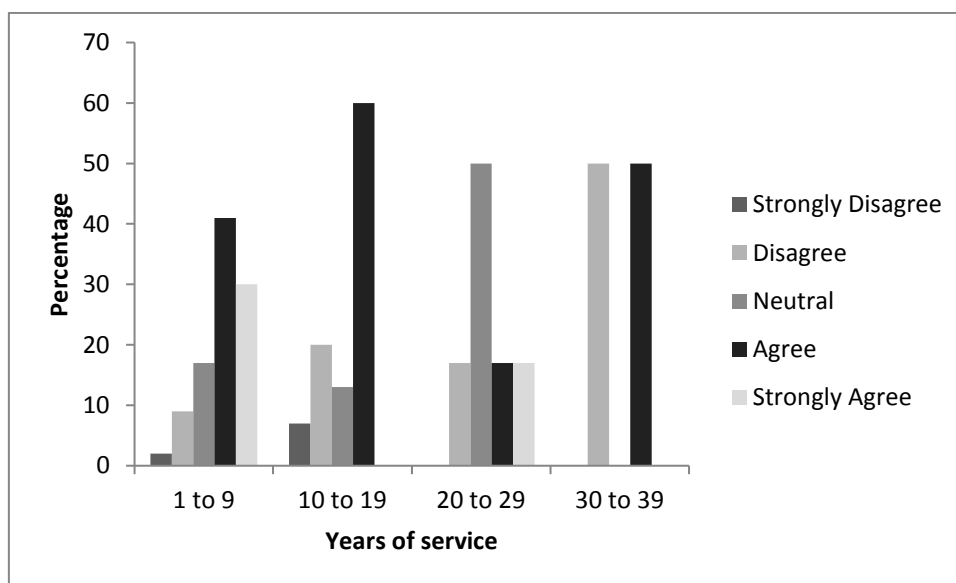


Figure 4.2: Teachers' opinions by teaching experience

The third item in this factor indicated how teachers ranked the frequency of school inspectors visiting their schools and providing constructive feedback that enhanced their teaching. There was a diversity of perspectives among science teachers. Seven (47%) of these science teachers indicated that school inspectors visited their schools regularly and provided constructive feedback, but six (40%) of them responded negatively. In contrast, 33 (61%) of the humanities and social sciences teachers

“strongly agreed” or “agreed” that school inspectors often visited their schools and offered them constructive feedback. In terms of gender, nine (60%) male teachers and 11 (52%) female teachers were satisfied with the school inspections carried out. There was also a disparity in ratings between and among teachers with different years of teaching experience. Twenty-seven (59%) and six (40%) of the teachers with one to nine and ten to 19 years of service respectively were satisfied with the frequency of school inspections. Three (50%) of the teachers with 20 to 29 years of service felt ambivalent and both (100%) of the teachers with 30 to 39 years of service rated their feelings negatively. Eight (73%), 29 (54%) and three (75%) of the teachers with diploma, bachelors and masters degree qualifications respectively felt that school inspectors frequently visited their schools and provided feedback. Again, figures show that only the more experienced teachers were inclined to be dissatisfied with the frequency of school inspections carried out. Chapter 6 will discuss possible reasons behind these findings.

Factor 4: Teaching morale

This factor had two items. The first item investigated the degree of agreement or disagreement about how confident teachers felt about their ability to influence effective learning in classes because of student discipline problems. Eight (53%) of science teachers responded negatively. However, among the humanities and social sciences teachers 20 (37%) felt confident, and another 20 (37%) felt less confident. In terms of gender, 19 (40%) of the male teachers did not feel confident enough to influence learning because of student discipline problems, with another 19 (40%) responding positively. By comparison, nine (42%) of the female teachers considered themselves as less confident, seven (33%) felt confident and five (24%) felt ambivalent. With respect to years of teaching experience, four (67%) of the teachers with 20 to 29 years of service felt less confident about influencing effective learning because of student behavioural problems. In contrast, eight (53%) of the teachers with ten to 19 and two (100%) of the teachers with 30 to 39 years of service were confident that they could undertake such a role. The data also show that although seven (64%) of the teachers with diploma qualifications rated their confidence positively, 25 (46%) and two (50%) of the teachers with bachelors degree and masters degree qualifications respectively felt less confident or neutral. Chapter 6 will discuss reasons for some of these rating disparities. Figure 4.3

provides a summary of the responses of the science, humanities and social sciences teachers in relation to this item.

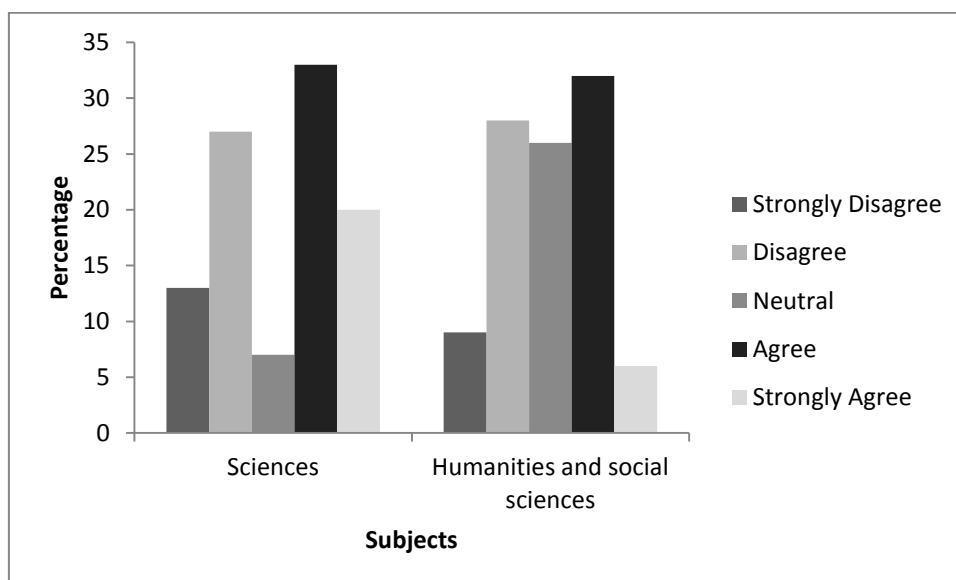


Figure 4.3: Teachers' rating of opinion by subject area of specialisation

The second item asked whether teachers felt exhausted with classroom teaching alongside other school activities. Results revealed that seven (47%) of science teachers and 21 (39%) of the humanities and social sciences teachers agreed that they felt exhausted in these combined roles. In terms of gender, 18 (38%) of the male teachers and ten (47%) of the female teachers said they were exhausted. Interestingly, 19 (41%) of teachers with less than ten years of service did not feel exhausted, but eight (53%) of the teachers with ten to 19 years of service and three (50%) of the teachers with 20 to 29 years of service indicated that they felt exhausted performing multiple duties. In addition, of the two teachers with 30 to 39 years of service, one felt exhausted, while the other did not. In terms of teaching qualifications, six (55%) and three (75%) of the teachers with diploma and masters degree qualifications indicated that they felt exhausted. However, only 21 (39%) of the teachers with bachelor degree qualifications rated their feelings positively. Generally, there was a wide range of responses in relation to this item. Possible reasons for these differing findings will be presented in the discussion chapter.

Factor 5: Career and collegial support

Factor 5 contained two items, the first of which invited teachers to rate their feelings in relation to promotion. The majority of teachers across demographics reacted negatively. More precisely, ten (67%) of the science teachers and 34 (63%) of the humanities and social sciences teachers disagreed that they were promoted appropriately. In terms of gender and or years of service, 32 (67%) of the male teachers and 12 (57%) of the female teachers, 30 (65%) of the teachers with one to nine years of service, nine (60%) of the teachers with ten to 19 years of service and four (67%) of the teachers with 20 to 29 years of service demonstrated similar responses. However, of the two teachers with 30 to 39 years of service, one disagreed that he was promoted appropriately, while the other was undecided. In respect of levels of education, eight (73%), 34 (63%) and two (50%) of the teachers with diploma, bachelors degree and masters qualifications respectively did not appear to believe that they were promoted appropriately. In this item, “disagree” responses were followed by “neutral” responses throughout almost all of the study demographic categories. These negative ratings suggest that most teachers felt unhappy or overlooked for promotion. Figures 4.4 and 4.5 offer a graphic representation of how teachers with various teaching experience and qualifications rated their perceptions in relation to promotion.

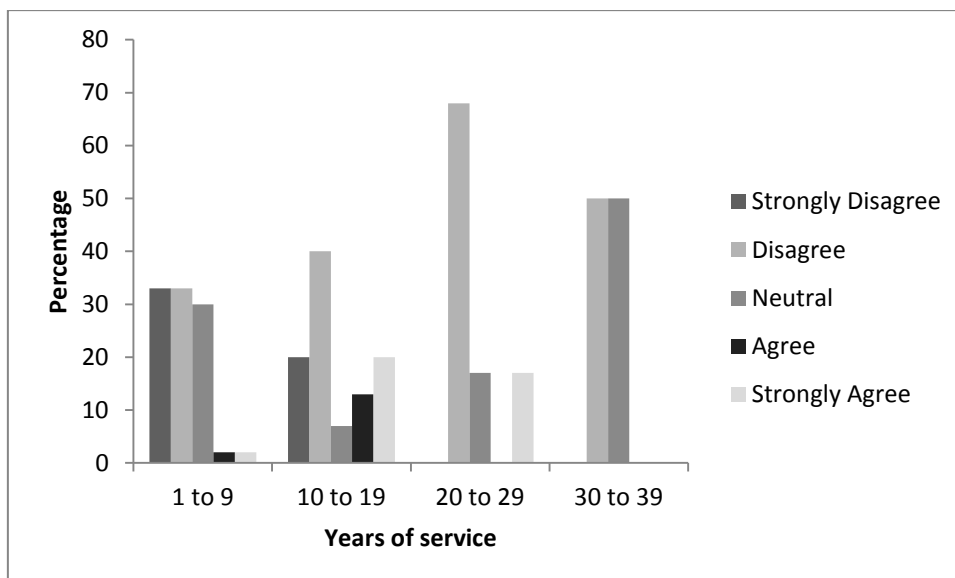


Figure 4.4: Teachers' perceptions by teaching experience

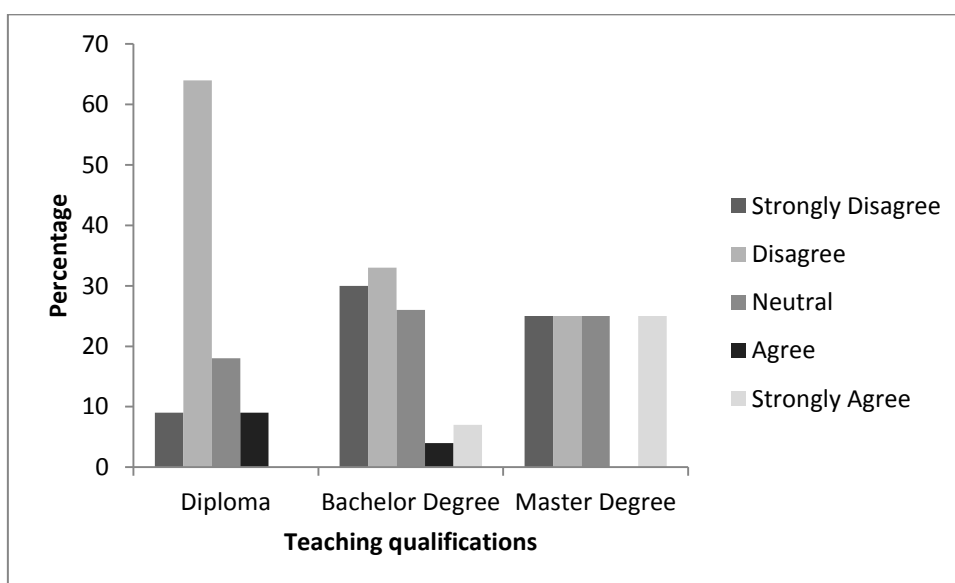


Figure 4.5: Teachers' perceptions by qualifications

The second item asked teachers to self-rate with regard to the attempts of the school to create an environment that was supportive and helpful in enabling more successful teaching and learning. Seven (47%) of the science teachers and 20 (37%) of the humanities and social sciences teachers felt that the school created an environment conducive to meaningful student learning. In effect, almost half of the science teachers responded positively in relation to this item as compared to humanities and social science teachers, who were far less affirming as a group.

Possible reasons for this differing response pattern will be offered in the discussion chapter. Of male teachers, 18 (38%) felt neutral, and 17 (35%) indicated positively that the school created an environment that was supportive of successful teaching and learning. In addition, ten (48%) of the female teachers rated their responses positively.

Positive ratings were demonstrated by 20 (44%) of the teachers with less than ten years of service and seven (47%) of the teachers with ten to 19 years of service. However, five (83%) and two (100%) of the teachers with 20 to 29 and 30 to 39 years of service were “uncertain” about whether the school created an environment that was supportive of and helpful to successful teaching and learning. Teachers with diploma, bachelors degree and masters degree qualifications who maintained the same ambivalent sentiments were three (27%), 19 (35%) and one (25%) respectively. These findings indicate that the more experienced teachers had more negative perceptions towards the school’s endeavours to create a supportive environment.

4.1.2. Part 1 findings: Summary of major trends

Among the five factors, the first factor gained a higher number of favourable responses than the others. A considerable majority of teachers felt they had the professional competences necessary for effective teaching and learning. A large number of teachers had a negative attitude towards teaching large classes. Notwithstanding that some teachers demonstrated divergent feelings around some items, it can be concluded that many teachers had low teaching morale (factor 4), and had difficulty in dealing with students (factor 2). It was also found that most teachers were dissatisfied with school resourcing (item one of factor 3), as well as career and collegial support (factor 5). As will be seen, my qualitative findings enabled these blunt findings to be illuminated by specific instances.

4.2. Questionnaire part 2: Factor analysis summary

The major objective of the second part of the questionnaire was to determine the efficacy beliefs of teachers in the context of the government’s expansion of secondary education. To this end, teachers rated items on a five-interval Likert scale from 1 (nothing) to 5 (a great deal) in relation to the degree of confidence they felt with each statement. As with part 1 of the questionnaire, teachers’ responses were

subsequently subjected to factor analysis to obtain factors with the potential to identify thematic headings related to teachers' self-efficacy.

Prior to this practice, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test were performed for the sake of determining the suitability of my data for factor analysis. The KMO measure of sampling adequacy was 0.69, which was above the suggested minimum value of 0.5, and Bartlett's test of sphericity had a significant result of $\chi^2(231) = 550.387, p < .000$. These results satisfied the requirements, therefore allowing the factor analysis to be undertaken. The diagonals of the anti-image correlation matrix were all above 0.5, and the communalities were all above 0.3. Given this result, factor analysis was conducted with all 30 items.

After several steps, a total of ten items was omitted and 20 items retained for further analysis. Again, the eliminated items had either the lowest loadings or were found to be loaded on more than one factor. The 20 retained items produced seven factors. Factors were extracted using the principal axis factoring technique, which produced the eigenvalues for the initial factor. The initial eigenvalues showed that factor one accounted for 26.1% of total variance, factor two 10.0%, factor three 7.4%, factor four 6.6%, factors five and factor six 5.8%, and factor seven 5.2%. The seven factors collectively accounted for 66.9% of the total variance with all having eigenvalues greater than 1. After extraction, varimax rotation balanced out items with others of a relative equal importance. Before rotation, most items were loaded on the first factor, but after the varimax rotation the items were regrouped into seven factors. Table 4.4 below presents the loadings of items in relation to each factor after rotation procedures were implemented.

Table 4.4: Questionnaire part 2 - Factor loadings after varimax rotation

Items	Factors						
	1	2	3	4	5	6	7
How much can you do to control disruptive behaviour in the classroom?	0.626						
How much can you do to make students enjoy coming to school?	0.774						
How much can you get students to trust teachers?	0.746						
How much can you get students to believe they can do well in school work?	0.680						
How much can you do to get parents to become involved in school activities?		0.516					
How much can you do to get community groups involved in the school?		0.530					
How much can you do to get businesses involved in working with the school?		0.834					
How much can you do to get local colleges and universities involved in working with the school?		0.686					
How much can you do to get students work together?			0.574				
How much can you do to overcome the influence of adverse community conditions on student learning?			0.512				
How much can you do to get children to do their work?			0.689				
How much can you do to enhance collaboration between teachers and the administration?			0.502				
How much can you assist parents in helping their children to do well in school?				0.811			
How much can you do to make parents feel comfortable coming to school?				0.672			
How much can you influence the decisions that are made in the school?					0.723		
How much can you express your views freely on important school matters?					0.682		
How much can you do to get through to the most difficult students?						0.840	
How much can you motivate students who show low interest in schoolwork?						0.644	
How much can you do to help other teachers with their teaching skills?							0.823
How much can you do to increase students' memory of what they have been taught in previous lessons?							0.505

Once the groups of items were identified, an overall theme was established for each factor, as shown in table 4.5. Before labelling, however, I scrutinised all items in each factor in order to ascertain thematically if they adequately fitted in the particular factor as I interpreted it (McCallum, 1995). This practice prompted me to remove the third item in factor one and the fourth item in factor three as I took them to be outliers in terms of my interpretation of these factors. I also saw the first item in factor two as strongly complementing other items in factor four. For this reason, I shifted this item from factor two to factor four. Factor seven was omitted for further analysis because the two items appeared to lack any basis for thematic coherence. One item in this factor was around “teaching skills” and the other was about “memory”. For this reason, although this factor emerged as a factor, I decided not to use it. The process adopted here is in accordance with the suggestion of Locke and Johnston (2016) that a researcher may justifiably reject a factor when he or she is unable to find any thematic linkage among the items.

The first factor was labelled “Creating a productive learning environment”, because the clustered items reflected the efforts of teachers in ensuring that effective teaching and learning took place. The second factor was categorised as “Enlisting community support and involvement”. All items in this factor were interpreted as related to teachers’ sense of their ability to influence different groups to work collaboratively with the school in order to achieve its educational goals. The third factor was labelled “Motivational ability”, since the items related to teachers’ self-perceived ability to enhance effective and meaningful teaching and learning in the school. The fourth factor was categorised as “Enlisting parental involvement” because all the items referred to teachers’ self-perceived capacity to influence parents to work with teachers and the school for effective student achievement. The fifth factor was termed “Having a voice in decision-making”. The associated items related to the extent to which teachers felt able to offer their opinions and influence decision-making that would enhance the academic welfare of students. The sixth factor was labelled “Helping reluctant/unmotivated students”, because the students alluded to in the two items were perceived as challenging i.e. the most difficult students and those with a low interest in learning. Table 4.5 lists the items which comprised each factor and the thematic categorisation I attributed to each one.

Table 4.5: Questionnaire part 2 - Factorised items and their specific labels

Factor	Related items
Creating a productive learning environment	<ol style="list-style-type: none"> 1. How much can you do to control disruptive behaviour in the classroom? 2. How much can you do to make students enjoy coming to school? 3. How much can you do to get students to believe they can do well in school work?
Enlisting community support and involvement	<ol style="list-style-type: none"> 1. How much can you do to get community groups involved in working with the schools? 2. How much can you do to get businesses involved in working with the school? 3. How much can you do to get local colleges and universities involved in working with the school?
Motivational ability	<ol style="list-style-type: none"> 1. How much can you do to get students to work together? 2. How much can you do to overcome the influence of adverse community conditions on students' learning? 3. How much can you do to get children to do their homework?
Enlisting parental involvement	<ol style="list-style-type: none"> 1. How much can you assist parents in helping their children to do well in school? 2. How much can you do to make parents feel comfortable coming to school? 3. How much can you do to get parents to become involved in school activities?
Having a voice in decision-making	<ol style="list-style-type: none"> 1. How much can you influence the decisions that are made in the school activities? 2. How much can you express your views freely on important school matters?
Helping reluctant/unmotivated students	<ol style="list-style-type: none"> 1. How much can you do to get through to the most difficult students? 2. How much can you do to motivate students who show low interest in schoolwork?

4.2.1. Questionnaire part 2: Presentation and description of findings

This section reports on the findings related to how teachers rated items in terms of self-confidence. Unlike the first part of the questionnaire, all items in part 2 were phrased in positive terms, meaning that the higher the ratings, the higher the feelings of self-efficacy; the lower the ratings, the less the feelings of self-efficacy. Teachers who ranked their opinions at the high end of the scale (“a great deal”) were viewed as reporting themselves as more or highly effective in relation to this aspect of their professional practice. Teachers who ranked their perspectives as “quite a bit” were viewed as possessing a moderate level of capability. “Some influence” responses were used interchangeably with phrases such as “some impact”, “some ability”,

“some confidence”, “some control” or “some success”. “Very little” responses were taken as indicating that teachers considered themselves as having a limited sense of competence. Finally, “nothing” responses referred to teachers who indicated that they lacked competence in relation to the item in question. Sub-section 4.2.2 will illustrate how these ratings will be grouped in order to provide an interpretation of each factor item. As with the first part of the questionnaire, findings reported on here are accompanied by graphs and tables where this is deemed appropriate and helpful to the reader. A comprehensive set of tables with frequencies and percentages from this section can be found in appendix 17.

Factor 1: Creating a productive learning environment

This factor involved four items. The first item required teachers to rate their perceived capabilities in controlling disruptive behaviour in the classroom. It was found that 12 (80%) of the science teachers and 30 (56%) of the humanities and social science teachers regarded themselves as very capable in this regard. A high rating was also displayed by 31 (65%) of the male teachers and 11 (52%) of the female teachers. When these data were analysed according to teaching experiences the results were as follows: 27 (59%) of the teachers with one to nine years of service; ten (67%) of the teachers with ten to 19 years of service; three (50%) of the teachers with 20 to 29 years of service; and two (100%) of the teachers with 30 to 39 years of service felt they had a high level of confidence in controlling disruptive behaviour. In terms of levels of education, ten (91%) of the teachers with diploma qualifications and 30 (56%) of those with bachelors degree qualifications felt highly capable at undertaking this task. However, among the teachers with masters degree qualifications, two felt “fairly capable”, and another two felt “extremely capable”. Overall, most teachers believed that they were effective in controlling disruptive behaviour in the classroom, which is a crucial factor in ensuring that meaningful student learning takes place.

The second item asked for teachers’ perceptions about their ability to motivate students to enjoy coming to school. The analysis indicated that 27 (50%) of the humanities and social science teachers, and seven (47%) of the science teachers were very confident that they could influence students to enjoy coming to school. In addition, six (40%) of the science teachers felt that they could exercise such

influence to some extent. In terms of gender, 23 (48%) of the male teachers and 11 (52%) of the female teachers indicated that they were able to motivate students to enjoy coming to school. On one hand, 29 (63%) of the teachers with one to nine years of service and two (100%) of the teachers with 30 to 39 years of service felt very effective in motivating students to enjoy coming to school. On the other hand, eight (53%) and five (83%) of the teachers with ten to 19 and 20 to 29 years of service respectively regarded themselves as moderately proficient in carrying out such a task. Regarding educational background, seven (64%) of the teachers with diploma qualifications and three (75%) of those with masters degree qualifications felt very effective in carrying out the task. Among the teachers with bachelors degree qualifications, 23 (43%) felt moderately effective, and 24 (44%) considered themselves as highly effective. These statistics show that the majority of teachers rated their ability to motivate students to enjoy coming to school between “quite a bit” and “a great deal”. This suggests that these teachers were positive about undertaking such a professional task.

The third item in this factor dealt with how teachers ranked their capabilities in making students believe they can do well in school work. Nine (60%) of the science teachers, 31 (57%) of the humanities and social science teachers, 27 (56%) of the male teachers and 13 (62%) of the female teachers indicated a high level of confidence in their ability to make students believe they can do well in school work. In regard to teaching experience, 30 (65%) of the teachers with one to nine years of service and seven (47%) of the teachers with ten to 19 years of service rated their ability as highly as the aforementioned categories of teachers. In addition, four (27%) of the teachers with ten to 19 years of service felt that they had “some capability” in this respect, with another four (27%) describing their capabilities as “moderate”. Three (50%) of the teachers with 20 to 29 years of service felt “fairly capable”, while of the two teachers with 30 to 39 years of service, one felt “fairly capable”, and the other “extremely capable”. Based on educational background, nine (82%) of the teachers with diploma qualifications and 30 (56%) of the teachers with bachelors degree qualifications felt “highly capable” at making students believe they could do well in school work. In contrast, 2 (50%) of the teachers with masters degree qualifications showed a moderate amount of confidence that they could undertake such a professional role. Various factors which reduced some

teachers' confidence in making students believe that they could do well in their school work will be discussed in the next chapter (i.e., Chapter 6). Figure 4.6 below represents how teachers with varying degree of experiences rated their abilities in relation to this particular item.

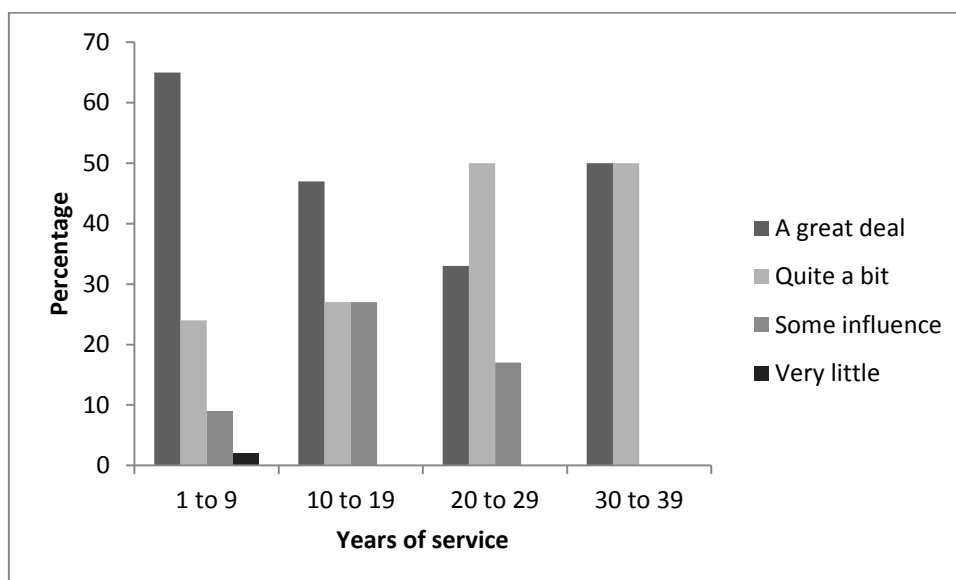


Figure 4.6: Teachers' rating of their ability by teaching experience

Factor 2: Enlisting community support and involvement

Factor two comprised three items. The first item asked teachers to self-rate their confidence regarding their ability to get community groups involved in working with their school. Only four (27%) of the science teachers, five (9%) of the humanities and social science teachers, and seven (15%) of the male teachers and two (10%) of the female teachers considered themselves “very confident” that they could influence community groups to become involved in working with the school. The same level of confidence was demonstrated by seven (15%) of the teachers with less than ten years of service, one (7%) of the teachers with ten to 19 years of service and one (17%) of the teachers with 20 to 29 years of service. In contrast, two (100%) of the teachers with 30 to 39 years of service regarded themselves as having “some influence”. Teachers with diploma and bachelor degree qualifications who felt highly confident in getting community groups involved in working with the school were two (18%) and seven (13%) respectively. In addition, three (75%) of the teachers with master degree qualifications felt they had “some influence”.

Overall, in this item, most teachers rated their ability as either “nothing”, “very little”, or “some influence” in involving community groups in the school. This suggests that the majority of teachers had a relatively low degree of confidence about influencing community groups in working with their school.

The second item invited teachers to rate their confidence to get businesses to become involved in working with their school. A total of seven (47%) of the science teachers and 17 (32%) of the humanities and social science teachers felt that they had “some influence” in this regard. In addition, among the science teachers, three (20%) indicated that they lacked confidence, and another three (20%) felt they had very limited confidence to encourage businesses to work with the school. With regards to gender, only four (8%) of the male teachers and one (5%) of the female teachers indicated a great deal of confidence that they could exercise such influence. On the basis of teaching experience, the majority of the teachers with one to nine years of service (37%) and those with ten to 19 years of service (40%) indicated that they had some capacity to involve businesses in working with the school. Furthermore, four (67%) of the teachers with 20 to 29 years of service, and two (100%) of those with 30 to 39 years of service, viewed themselves as lacking such a capacity. In terms of teaching qualifications, four (36%) of the teachers with diploma qualifications reported a “very limited” sense of confidence in dealing with businesses. In contrast, 19 (35%) and two (50%) of the teachers with bachelors and masters degree qualifications respectively, rated themselves as having “some influence”. These ratings clearly suggest that teachers’ participants generally lacked confidence in respect of convincing businesses to become involved in working with their schools.

The third item in this factor indicated the degree to which teachers considered themselves capable of getting local colleges and universities involved in working with their respective schools. Among the science teachers, five (33%) rated themselves as poor, and five (33%) as moderately capable. In the category of humanities and social science teachers, 14 (26%) thought they had “limited aptitude”, and 14 (26%) regarded themselves as having “some aptitude” at getting local colleges and universities to work with their school. Twelve (25%) of the male teachers felt they had “very little” capability to convince such institutions, while 11

(23%) felt they lacked any capability whatsoever. Similarly, six (29%) of the female teachers felt they had “some ability” to get local institutions to support their school endeavours, but five (23%) of them believed that they “did not have any ability” to do so. In regard to teaching experience, 13 (28%) of the teachers with one to nine years of service indicated that they “lacked the capability” to influence local colleges and universities. However, four (27%) of the teachers with ten to 19 years of service felt they had “some ability”, with another four (27%) describing their ability as “average”. Whereas three (50%) of the teachers with 20 to 29 years of service possessed “very minimal ability” to influence such institutions, two (100%) of the teachers with 30 to 39 years of service felt they had “moderate ability”. Only one (9%) of the teachers with diploma qualifications and six (11%) of those with bachelors degree qualifications ranked their ability “high” in relation to this item. A reasonable number of the teachers with masters degree qualifications (50%) believed they had “some” ability. In this item, then, the majority of teachers across demographics ranked their aptitude below average in influencing local colleges and universities to be involved in working with their school.

Factor 3: Motivational ability

Factor three had three items. The initial item asked how capable teachers felt in helping students work together. Eight (53%) of the science teachers and 25 (46%) of the humanities and social science teachers felt they were “excellent” at helping students work together. With reference to gender, 20 (42%) of the male teachers and 13 (62%) of the female teachers demonstrated the same degree of self-confidence. However, the figures show that most male teachers viewed themselves as having lesser ability to help students work together when compared to their female counterparts. Possible reasons for this discrepancy will be offered in Chapter 6. In regard to teaching experience, teachers with one to nine and ten to 19 years of service who felt “extremely capable” in helping students work together were 24 (52%) and six (40%) respectively. Two (33%) of the teachers with 20 to 29 years of service felt somewhat effective, and another two (33%) of the teachers in the same demographic category viewed themselves as “very effective”. Likewise, of the two teachers with 30 to 39 years of service, one felt “moderately effective”, while the other felt “very effective”. In terms of teaching qualifications, seven (64%) of the teachers with diploma qualifications, 38 (70%) of the teachers with bachelors

degree qualifications and four (100%) of the teachers with masters degree qualifications were positive that they could influence students to work together. These figures indicate that the majority of teachers believed that they could influence students to work together. Figure 4.7 offers a graphic representation of how male and female teachers self-rated their abilities in relation to this item.

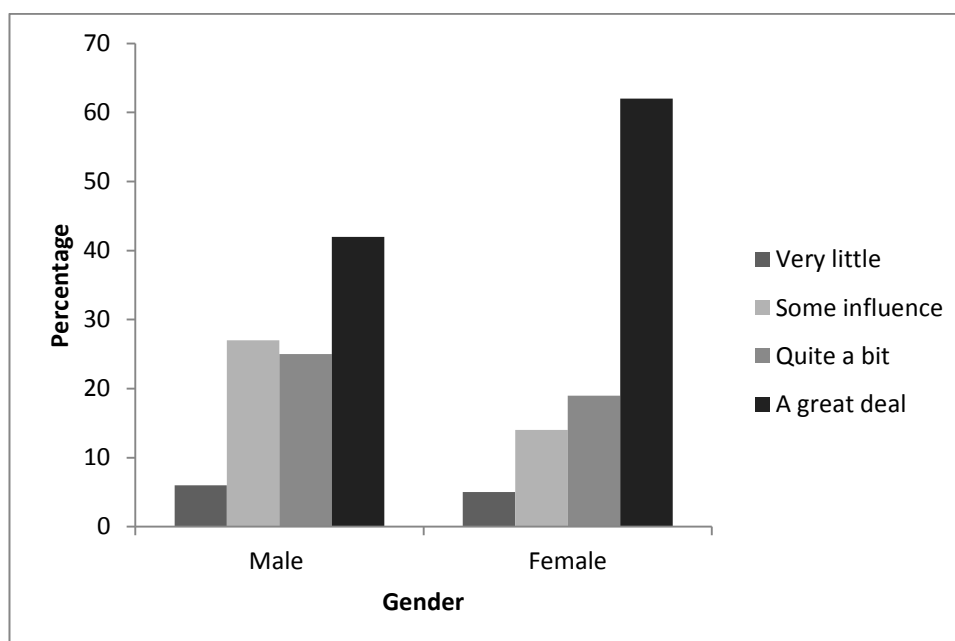


Figure 4.7: Teachers' ratings of their ability by gender

The second item invited teachers to rate their ability to overcome the influence of adverse community conditions on the learning capabilities of their students. On the basis of subject areas, seven (47%) of the science teachers felt “fairly effective” in overcoming the influence of adverse community conditions on student learning. Twenty (37%) of the humanities and social science teachers judged themselves as having “some degree of control” in relation to this issue. In terms of gender, 17 (35%) and nine (43%) of the male teachers and the female teachers respectively felt they had “some” or “moderate capability” to address such conditions. With respect to length of service, 20 (44%) of the teachers with one to nine years of service and ten (67%) of the teachers with ten to 19 years of service indicated strongly that they could overcome the influence of adverse community conditions on student learning. Three (50%) of the teachers with 20 to 29 years of service viewed themselves as

having “very little” ability to manage this issue. Of the two teachers with 30 to 39 years of service, one regarded himself as having “some” impact, while the other felt “fairly capable”. Evidence indicates that six (54%) of the teachers with diploma qualifications and 19 (35%) of the teachers with bachelors degree qualifications believed they had “some success” in overcoming the influence of adverse community conditions. Finally, two (50%) of the teachers with masters degree qualifications indicated having “moderate” capability. These results suggest that most teachers felt they lacked effectiveness in overcoming the influence of adverse community conditions on student learning.

The third item under this factor sought the self-perceived aptitude of teachers in ensuring children did their homework. Nine (60%) of the science teachers and 29 (54%) of the humanities and social science teachers were “very confident” that they could ensure that children did their homework. The same degree of confidence was expressed by 26 (54%) of the male teachers and 12 (57%) of the female teachers. In relation to teaching experience, 29 (59%) of the teachers with one to nine years of service, six (40%) of the teachers with ten to 19 years of service, three (50%) of the teachers with 20 to 29 years of service, and two (100%) of the teachers with 30 to 39 years of service showed a high degree of confidence in their ability to influence children to do their homework. Teachers with diploma, bachelor degree and master degree qualifications who felt “highly confident” in this area were six (55%), 29 (54%) and three (75%) respectively. These favourable ratings suggest that a clear majority of teachers felt they had enough professional authority to influence children to do their homework.

Factor 4: Enlisting parental involvement

Factor 4 consisted of three items. The first item asked teachers to rate their self-perceived ability to assist parents in helping their children to do well in school. While nine (60%) of the science teachers indicated a “moderate” level of confidence that they could achieve this task, 24 (44%) of the humanities and social science teachers considered themselves as having “some influence”. Another significant finding was that only 11 (23%) of the male teachers and two (10%) of the female teachers had a “high” sense of confidence that they could assist parents to help their children to do well in school. Nineteen (41%) of the teachers with one to nine years

of service felt they had “some degree” of effect with regard to this matter, with seven (47%) of the teachers with ten to 19 years of service indicating their capacity as “average”. Surprisingly, three (50%) of the teachers with 20 to 29 years of service reported that they had “some confidence”, while another three (50%) of them reported they had “a great deal of confidence” to assist parents in helping their children to do well in school. Of the two teachers with 30 to 39 years of service, one felt “fairly effective” and the other considered himself “very effective”.

In terms of educational levels, four (36%) teachers with diploma qualifications were “very positive” that they could offer this assistance. Another three (27%) of these teachers indicated having “some capability” to influence parents to help their children to do well in school, with a further three (27%) indicating their capabilities as “average”. In the category of the teachers with bachelor degree qualifications, 20 (37%) expressed “some degree of confidence”, and 19 (35%) were “moderately confident”. Finally, two (50%) of the teachers with masters degree qualifications viewed themselves as having “some influence”. These figures show that the majority of teachers had relatively high self-belief that they could influence parents to help their children to do well in school.

The second item under this factor required teachers to self-rate in terms of their ability to make parents feel comfortable coming to the school. Seven (47%) of the science teachers and 19 (35%) of the humanities and social science teachers felt they had “some ability” in making parents feel comfortable coming to school. Equally, 18 (38%) of the male and eight (38%) female teachers indicated a similar degree of ability. There was a wide range of responses among teachers in relation to teaching experience. Among the teachers with less than ten years of service, 16 (35%) felt “very confident” about their effectiveness in making parents feel comfortable coming to school, and 15 (33%) felt “quite capable”. In contrast, 7 (47%) of the teachers with ten to 19 years of service and three (50%) of the teachers with 20 to 29 years of service did not feel particularly confident in this regard. Of the two teachers with 30 to 39 years of service, one felt “quite effective” and the other felt “wholly effective”. Teachers with diploma, bachelors degree and master degree qualifications who felt confident about achieving this task were six (55%), 37 (69%) and three (75%) respectively. These findings suggest that a significantly

large proportion of teachers felt capable re making parents feel comfortable about coming to the school.

The third item related to how the teachers felt about their ability to influence parents to become involved in school activities. Six (40%) of the science teachers and 18 (33%) of the humanities and social science teachers regarded themselves as having “moderate” or “some” confidence in influencing parents to engage in school activities. In addition, 17 (32%) of the humanities and social science teachers reported a “moderate” degree of confidence. In terms of gender, 15 (31%) of the male teachers were “moderately confident” in involving parents in school activities. Conversely, of female teachers, nine (43%) believed they had “some degree of confidence”, and eight (38%) rated themselves as “moderate”. Regarding teaching experience, 16 (35%) and seven (47%) of the teachers with one to nine and ten to 19 years of service felt they had “some” and “moderate” confidence respectively to influence parents to become involved in school activities. Whereas three (50%) of the teachers with 20 to 29 years of service saw themselves as having “very limited” confidence in relation to this task, two (100%) of the teachers with 30 to 39 years saw themselves as possessing “high” confidence. Based on professional qualifications, three (27%) and 20 (37%) of the teachers with diploma and bachelors degree qualifications respectively showed “some” and “a moderate level” of confidence that they could convince parents to become involved in school activities. By contrast, two (50%) of the teachers with masters degree qualifications rated themselves as “highly” confident. Overall, these findings indicate that most teachers did not feel particularly confident in influencing parents to become involved in school activities.

Factor 5: Having a voice in decision-making

This factor was made up of two items. The first item investigated teachers’ sense of being able to influence the decisions made in their schools. A total of six (40%) of the science teachers, and 20 (37%) of the humanities and social science teachers believed they had “some” agency in this factor. A further five (33%) science teachers had a “strong” belief that they could influence these decisions. Of male teachers, 15 (31%) believed they had “some capability” and another 15 (31%) a “high capability” to influence decisions. Additionally, 11 (52%) female teachers

considered themselves as having “some influence”. In relation to years of service, 16 (35%), seven (47%) and three (50%) of the teachers with one to nine, ten to 19 and 20 to 29 years of service respectively indicated having “some ability” to influence decisions. In contrast, two (100%) of the teachers with 30 to 39 years of service felt “fully capable” of influencing such decisions. In respect of teaching qualifications, 22 (41%) of the teachers with bachelors degree qualifications indicated they had “some influence”. However, teachers with diploma and masters degree qualifications who demonstrated strong self-belief in this matter were six (65%) and four (100%) respectively. The results imply that most teachers demonstrated a high degree of self-confidence in influencing the decisions that were made in the school.

Another item in this factor explored teachers’ beliefs in their ability to express their views freely on important school matters. Eight (53%) of the science teachers and 25 (46%) of the humanities and social science teachers felt “confident” in their ability to express their views freely on important school matters. The same confidence level was displayed by 24 (50%) of the male teachers, nine (43%) of the female teachers, 18 (39%) of the teachers with one to ten years of service, 11 (73%) of the teachers with ten to 19 years of service and two (100%) of the teachers with 30 to 39 years of service. In addition, two (33%) of the teachers with 20 to 29 years of service regarded themselves as “fairly capable” and another two (33%) as “highly capable”. In relation to qualifications, teachers with diploma, bachelors degree and masters degree qualifications who felt “fully confident” in this matter were seven (64%), 22 (41%) and four (100%) respectively. These statistics indicate that teachers were generally confident in relation to expressing their views on important school matters.

Factor 6: Helping reluctant/unmotivated students

Factor six contained two items. The first item sought to identify teachers’ confidence in supporting the most difficult students. Findings indicated that only four (27%) of the science teachers and 11 (20%) of the humanities and social science teachers felt very effective in assisting the most difficult students. Additionally, five (33%) of the science teachers and 21 (39%) of the humanities and social science teachers considered themselves as having “moderate” or “some” ability.

In respect of gender, ten (21%) of the male teachers and five (24%) of the female teachers displayed a high degree of confidence. Comparable responses were shown by nine (20%) of the teachers with less than ten years of service and six (40%) of the teachers with ten to 19 years of service. In addition, 14 (30%) and six (40%) of the teachers with one to nine and ten to 19 years of teaching experiences felt they had “some influence” in helping the most difficult students. On the other hand, five (83%) and two (100%) of the teachers with 20 to 29 and 30 to 39 years of service rated themselves as having “some” and “moderate” confidence respectively. Concerning qualifications, four (36%) of the teachers with diploma qualifications and 21 (39%) of the teachers with bachelors degree qualifications felt they had some capability to support the most difficult students. In addition, two (50%) of the teachers with masters degree qualifications believed that they could “moderately” achieve this task. These findings suggest that the majority of teachers did not feel particularly capable in helping the most difficult students.

The second item asked teachers to assess their ability to motivate students who showed low interest in schoolwork. Ratings varied widely across demographic categories. In particular, five (33%) of the science teachers and 20 (37%) of the humanities and social science teachers considered themselves as having a “high” aptitude to motivate students who showed low interest in school work. In addition, six (40%) of those science teachers and 15 (28%) of the humanities and social science teachers expressed “moderate” confidence in undertaking such a professional role. In terms of gender, 17 (35%) of the male teachers and eight (38%) of the female teachers demonstrated a “high” degree of aptitude. On the one hand, 18 (39%), six (40%) and two (100%) of the teachers with one to nine, ten to 19 and 30 to 39 years of experience respectively felt confident enough that they could motivate those students. On the other hand, four (67%) of the teachers with 20 to 29 years of service and another six (40%) of the teachers with ten to 19 years of service described their ability as “moderate”. Finally, four (36%) of the teachers with diploma qualifications, 19 (35%) of the teachers with bachelors degree qualifications and two (50%) of the teachers with masters degree qualification felt “highly confident”. These responses suggest that the majority of teachers felt a reasonable degree of effectiveness in motivating students who showed a low interest in schoolwork.

4.2.2. Part 2 findings: Summary of major trends

As discussed in Chapter 2, self-efficacy can be defined in this context as teachers' beliefs about their ability to positively influence student learning outcomes. In this summary, I will be providing an overview of findings from the analysis of Part 2 of the questionnaire in order to identify trends in relationship to the six factors, and also in relationship to the various demographics featuring in the findings (i.e. length of service, gender, teaching qualification and subject area). In this summary, item ratings of 4 or 5 will be seen as potentially indicating positive self-efficacy and item ratings of 1 and 2 will be viewed as potentially indicating negative self-efficacy (i.e. a lack of self-efficacy). Item ratings of 3 will be viewed as indicating a lukewarm or neutral response to the rating, and a lack of positive self-efficacy.

As reported above, there was variation in ratings of degree of self-confidence in relation to the items across all six factors. By way of summary, it became clear that some items were more positively rated, while others were more negatively rated (see appendix 17). In particular, the following items appeared to indicate a strong degree of self-efficacy:

- all the items of factor 1 (Creating a productive learning environment): ability to control disruptive behaviours in the classroom, ability to motivate students to enjoy coming to school and ability to make students believe they can do well in school work;
- the first and third items of factor 3 (Motivational ability): capability of teachers in helping students work together and aptitude of teachers in ensuring children did their homework;
- the first and the second items of factor 4 (Enlisting parental involvement): ability to assist parents in helping their children do well in school and ability to make parents feel comfortable coming to the school,.
- the first and second items of factor 5 (Having a voice in decision-making): teachers' ability to influence the decision made in their schools and express their views freely on important school matters;
- the second item of factor 6 (Helping reluctant/unmotivated students): ability to motivate students who showed low interest in school work.

The following were more negatively geared ratings:

- all items of factor 2 (Enlisting community support and involvement): teachers' confidence to influence community groups, confidence to get businesses to become involved in working with their school, and confidence to get local colleges and universities involved in working with their respective schools;
- the second item of factor 3 (Motivational ability): ability to overcome the influence of adverse community conditions on the learning capabilities of their students;
- the third item of factor 4 (Enlisting parental involvement): ability to influence parents to become involved in school activities;
- the first item of factor 6 (Helping reluctant/unmotivated students): teachers' ability to support the most difficult students.

It also appeared that there were variations in the degree of self-confidence in relation to particular demographics. For example, although the majority of teachers rated certain items negatively, teachers with 30 to 39 years of service tended to rate these same items favourably. In contrast to other age-bands, these teachers demonstrated a high sense of self-efficacy in respect of the following:

- the third item of factor 3 (Motivational ability): aptitude to ensure children did their homework;
- the first item of factor 5 (Having a voice in decision-making): self-confidence in influencing the decisions that were made in the school;
- the first item of factor 6 (Helping reluctant/unmotivated students): capability to help the most difficult students.

A large percentage of science teachers indicated a high degree of self-efficacy in terms of the following as compared to their humanities and social science counterparts, who indicated a relatively low sense of efficacy:

- the first item of factor 3 (Motivational ability): helping students work together;
- all three items of factor 4 (Enlisting parental involvement): ability to assist parents in helping their children to do well in school, ability to make parents feel comfortable coming to the school, and ability to influence parents to become involved in school activities.

Male teachers expressed a high level of self-efficacy in relation to the third item of factor 4 (Enlisting parental involvement) i.e. ability to influence parents to become involved in school activities in comparison to female teachers, who reported a low level of self-efficacy. By contrast, female teachers indicated a high degree of self-efficacy in the following items when compared with their male colleagues:

- the first item of factor 3 (Motivational ability): helping students work together;
- the first item of factor 5 (Having a voice in decision-making): being able to influence the decisions made in their schools.

Teachers with master-degree qualifications showed a high level of self-efficacy in the following items:

- the second item of factor 3 (Motivational ability): ability to overcome the influence of adverse community conditions on the learning capabilities of their students;
- the first item of factor 6 (Helping reluctant/unmotivated students): confidence in supporting the most difficult students.

Teachers with diploma qualifications, female teachers, and teachers with 20 to 29 years of service demonstrated a lukewarm degree of self-efficacy in the following items:

- the second item of factor 3 (Motivational ability): helping students work together;
- the first item of factor 5 (Having a voice in decision-making) : expressing their views freely on important school matters;
- the first item of factor 6 (Helping reluctant/unmotivated students): supporting the most difficult students.

Finally, teachers with 20 to 29 years of service indicated a relatively low level of self-efficacy in relation to the third item of factor 4 (Enlisting parental involvement), i.e. influencing parents to become involved in school activities.

As with part 1 of the questionnaire, my qualitative findings will enable these findings from the quantitative data to be illuminated by specific examples. In addition, I will be exploring degrees of corroboration between the results just

reported and findings generated on the basis of a thematic analysis of the qualitative data in the chapters that follow.

CHAPTER 5: QUALITATIVE DATA FINDINGS

Chapter 4 reported findings based on an analysis of data gathered through closed-ended questionnaires. This chapter reports findings based on an analysis of qualitative data derived from open-ended questionnaires (Q), individual interviews (IT), and focus group interviews (FG) with teachers from the four schools studied in Tanzania in order to ascertain the impact of the government's secondary education expansion plan on their work as viewed through their eyes. Throughout my data collection journey teachers and school principals (heads of schools) openly and enthusiastically shared their experiences, impressions, feelings and beliefs. To facilitate my analysis, I organised the field notes and converted the bulk of the tape-recorded data into text data. As noted earlier (see Chapter 3), all data gathered through the use of Kiswahili were translated into English by a professional translator before actual analysis took place. Since I was the one who conducted the interviews with the teachers, in cases where the literal or direct translation skewed the meanings of teachers' responses made in their home language, I adjusted the English translation accordingly.

Once all transcripts were completed, I read rigorously and coded all the text data into provisional categories. Finally, I carefully established patterns across each of those categories until I felt confident in their fitness and coherence. As a consequence of this process, five broad themes emerged from my analysis of the qualitative data: school staffing, school infrastructure, resources for teaching, relationship with the community, and capacity of registered students. These themes will be reported on in some detail in the remainder of this chapter. Quoted responses will also be used to provide a rich picture of the real experiences of these teachers and to elaborate upon certain points made in this report. In connection with this, I will attempt to develop a sense of the participants' social worlds, including similarities and differences in perspectives, and teaching-related issues, in order to provide a better understanding for readers of the outcomes of my investigation.

5.1. School staffing

The secondary education expansion policy document indicated that the government intended to construct more schools, hire sufficient qualified competent teachers and recruit more school support staff. The policy promised that following employment,

new teachers would be offered professional learning in order to become more proficient in teaching and implementing the curriculum. On the basis of my investigation, however, teachers indicated that these plans, especially those related to staffing, had not been effectively implemented. Broad issues related to staffing were seen as affecting the operation of the schools and the careers of teachers involved. Evidence of these concerns will be provided in the following two sub-sections, one of which will focus on the government's shortfalls in increasing teacher numbers, while the other will report on the effectiveness (or not) of the expansion plan in improving the quality of teaching.

5.1.1. Increasing teacher numbers

As discussed in Chapter 1, the goal of the government in this particular matter was to overcome an acute shortage of teachers following the tremendous rise in the number of students in new schools. To achieve this, the expansion plan stipulated that the government would increase enrolment rates in teacher education. This would ensure that enough teachers with a diploma and bachelors degree qualifications would be provided. In order to lift student achievement, the government also stated that it would raise entry qualifications in both private and public-owned teachers' colleges and universities. However, three topics or concerns of particular relevance to these government initiatives emerged from my data analysis: intensive short-course training schemes, recruitment of less qualified teachers, and an imbalance between science, and humanities and social sciences teachers. Teachers' experiences in relation to each of these concerns are reported on below.

Intensive short-course training schemes

As explained in Chapter 1, as part of the expansion policy, the government introduced four-week courses ("crash programmes") to induct high-school leavers into the teaching profession. These teachers were issued with a teaching licence on condition that they would work for at least two years and thereafter enrol in various teachers' colleges or universities to acquire a diploma or a bachelor's degree in Education.

The more experienced teachers interviewed drew attention to the impact on the teaching profession of the intensive, short-course training introduced by the

government. They believed that teachers who were exposed to an induction programme of only one month would not be professionally competent since such teachers would lack the qualities, skills, and knowledge essential for professional teaching practice. For example, Jackson, an experienced teacher at Mafanikio School, and Mtendzi, an experienced teacher at Chuoni School, maintained that many teachers who were prepared in the crash programmes were “incompetent” in their teaching, owing to the short time they were exposed to training in the practices of classroom teaching (IT3; IT7). They emphasised that when these teachers were posted in schools they lacked “confidence”, as they generally felt “ashamed” and expressed “fear” regarding their teaching abilities. Jackson and Mtendzi were worried that because of the incompetence of such teachers, students with less intellectual ability had difficulty making sense of lesson content, because these teachers taught them without considering their intellectual needs.

Consistent with the above views, Mikogo and Igubike, among the three teachers who had attended this type of teacher preparation programme before undertaking a bachelor’s degree, agreed that the time dedicated to the initial induction course was very short, and that many teachers did not learn in detail how to deal with such professional documents as schemes of work. For her part, Igubike recalled, “I remember that during the programme, we were only given the schemes of work and lesson plans to look at how they were written, but we were not taught how to prepare them” (FG3). Both Mikogo and Igubike believed that it would make some sense if such teacher preparation was carried out for at least six months, accompanied by intensive teaching practice in nearby schools. In brief, Mikogo and Igubike felt inadequately prepared to teach when they first began as licensed teachers because of the limited duration of the intensive programme.

Of the 30 teachers interviewed, 11 maintained that before the adoption of the expansion policy it was common practice for an individual who chose to become a secondary school teacher to attend a teachers’ college or university for two or three years in order to acquire a diploma or bachelor’s degree respectively. Such teachers noted that the decision of the government to allow students who had completed form six to enrol in the crash programme was considered unacceptable by the Tanzania Teachers’ Union and the wider community. Such respondents provided a telling and amusing description of how teachers prepared through this crash

programme were labelled by other teachers and members of the community: because of the scope of this programme, these teachers were nicknamed “voda fasta”, after a Vodacom Cellular Phone Company promotion, which offered instant renewals of airtime to subscribers. For such respondents, this labelling indicated a widespread community view that these courses were a “disgrace” to the teaching profession because teachers exposed to such training would not be “competent” to teach their children.

Tembo, an experienced teacher from Chuoni School, recalled that during 2006-2007 a conflict erupted between teachers who were trained through the crash programme, and diploma or degree qualified teachers. This was because the crash-programme teachers were viewed by qualified teachers as teachers who were still basically students, and who therefore knew very little or nothing at all about teaching (IT6). In a similar vein, Mikogo, a product of such a programme, commented, “It reached a time when, despite our teaching aids, we overheard qualified teachers whispering sarcastically that we were incapable of teaching anything” (FG1). Mikogo concluded that such comments made crash-programme teachers feel “inferior” and hence lowered their confidence to teach.

The heads of schools and experienced teachers tended to share the view that owing to the short duration of this training many teachers had not studied in depth important subjects such as the professional code of conduct; consequently, they did not “behave” like professional teachers. These crash-programme teachers were reported as giving schools a great deal of trouble, in particular, certain male teachers who “engaged in unethical matters”. For example, Pendo, an experienced teacher from Nyikani School, and Kileo, the head of Chuoni School, mentioned that the dress adopted by those teachers who went through the interim training programmes was “unprofessional”, and undermined the ethical principles integral to the teaching profession in the country. Pendo and Kileo suggested that the unprofessional behaviour of these teachers made it difficult for them to deal with students’ disciplinary problems since they themselves did not serve as good role models. However, Wililo, the head of Mafanikio School, and Ngoma, the head of Bondeni School, acknowledged that, notwithstanding the weaknesses of the intensive short course schemes, the government decision to introduce them was good because it at

least helped to reduce the teaching workload in their schools – something that had not occurred previously.

Such findings suggest that the heads of schools and experienced teachers, in general, believed that the intensive short-course programme was unsatisfactory as it produced poor-quality teachers with inadequate content knowledge, poor pedagogical training and little understanding of required professional behaviour. A number of respondents indicated that having the graduates of these courses on the staff contributed to a negative image of the teaching profession, thereby lowering the morale of other teachers on the staff and affecting their ability to bring about effective student learning.

Recruitment of less qualified teachers

In their interviews, the heads of schools were asked the question: Do teachers in your school have the required teaching qualifications? In answering this question, all heads of schools declared that teachers in their schools were permanently employed and had appropriate teaching qualifications, that is, diploma and bachelor degrees. This clearly confirms that all those who were employed as licensed teachers had utilised the opportunity given by the government to upgrade their knowledge. The heads of schools, however, also expressed concern that although many teachers had acquired the requisite qualifications in recent years, issues pertaining to the delivery of knowledge and skills to students still persisted; quite a number of teachers were “not competent” in the classroom. Ngoma, the head of Bondeni School, wondered if this incompetence could be attributed to the fact that when new schools were established, the demand for teachers skyrocketed, thus attracting to the profession people with poor results in their school-based qualifications or history (IT12). Consistent with this view, Disma, the head of Nyikani School, remarked:

As a rule, I have to examine the academic qualifications of the teachers being posted here. However, what I see in their personal files usually disappoint me because many of them have poor academic foundations but they have been brought here to teach. For example, you might find a teacher who scored an F grade in a subject at ordinary level, and did not perform well at an advanced level but is teaching the same subject. What do you expect from a teacher with such a poor academic background? (IT9)

When probed to describe how such teachers, who enter teaching with low academic results, affect the profession, Tembo, an experienced teacher from Chuoni School, mentioned that such teachers do not generally introduce new ideas pertaining to their respective content area that would benefit the few experienced teachers and enrich their profession (IT6). In addition to Tembo's observation, Mhidze, an experienced teacher from Bondeni School, remarked, "Since the increase in schools attracted many students with average academic performance, many entered the teaching profession to get salaries and therefore make ends meet. Teaching is the only job with guaranteed employment" (IT13). He was concerned that teachers of this type are never serious and committed in their work. Their attitude imposed a big administrative "burden" on heads of schools, who had to constantly monitor these teachers to ensure that they acted professionally.

Kihombo, an experienced teacher from Mafanikio School, went further and stated that "because teaching attracted people who did not have the right qualifications, it came to a point where the community began to despise the teaching profession, calling it a domain of those who lack alternatives of employment" (IT2). Kihombo and Ngoma (the head of Bondeni School) indicated that such social criticism "discourages" people of high academic performance from entering the teaching profession; instead they undertake other careers, which are respected by society. This trend hinders the "intellectual development" of teachers, especially when it comes to matters related to professional development and mentoring. Teachers with average academic qualifications lack new professional knowledge and skills, which can only be gained through interactions with teachers with high academic backgrounds. To a large extent, findings suggest that the heads of schools and the more experienced teachers considered that what the government was doing in terms of recruiting less highly qualified teachers was tantamount to exposing the teaching occupation to forms of social stigma and labelling. Moreover, these respondents had little confidence that such teachers could make a difference to students' learning and to their colleagues' contributions to student learning.

An imbalance between science, and humanities and social science teachers

The government's efforts to achieve a balanced teaching workload in terms of teacher-student ratio within the science, and humanities and social science departments, when the expansion plan was under way, did not eventuate. It became

apparent from interviews that while science teachers taught two subjects, humanities and social science teachers taught only one. The differences in the number of teaching subjects for teachers were decided on the basis of the uneven distribution of teachers; there were generally more humanities and social sciences teachers than science teachers. It seemed that the government's failure to effectively educate students in natural science subjects at high school, so that they had the knowledge base to be good science teachers, had implications for the numbers of students undertaking teacher education programmes in science. This skewing of teaching workload was viewed as having a telling impact on teachers' classroom practices, and their beliefs about teaching and learning processes.

A number of respondents claimed that the shortage of science teachers was one of the challenges in preparing students to achieve an acceptable standard. Msaka, a Physics and Chemistry teacher from Nyikani School, and Mwamwezi, a Chemistry and Biology teacher from Bondeni School, commented that, owing to this critical shortage, the available teachers were obliged to teach two subjects in many classes and streams. They feared that having to teach two subjects in the same class was psychologically bad for students because, if they found a teacher to be boring in one subject, they had also to endure the same teacher in the second (FG3; FG4). Msaka and Mwamwezi reiterated that when this situation happened, the students ended up "disliking" a teacher, thereby undermining his or her desire to teach them.

It became apparent from the findings that if a science teacher did *not* teach two subjects, he or she was likely to teach one subject across streams or classes. Tembo, an experienced teacher from Chuoni School, was concerned that repeating the same content in many streams or classes resulted in teachers finding themselves unable to maintain "enthusiasm" in all those streams or classes (IT6). Zaituni, an experienced teacher from Bondeni School, supported this idea, noting: "When you teach many streams, you become very tired. Therefore, the first stream taught enjoys the lesson better than those that follow" (IT14). Additionally, Kiongozi, a Mathematics and Physics teacher from Mafanikio School, shared the view that teaching many classes or streams is academically unsound because it can sometimes happen that teachers "forget" which classes have been taught specific content. He declared that because of this kind of multiple-teaching schedule, although

professional standards require teachers to prepare a lesson plan for each stream, there is a temptation to prepare a single lesson plan to serve all streams (FG1).

While the science teachers viewed teaching one or two subjects from a negative perspective, their humanities and social sciences colleagues expressed contrasting views on this topic. On one hand, there were those who argued that teaching one subject is academically advantageous because it allows teachers enough time to engage in sound professional teaching preparation and hence maximise students' understanding of the subject content. On the other hand, there were those who claimed that teaching one subject rather than the two subjects they specialised in was over time detrimental to their professional content, knowledge, skills and expertise in respect of the subject in question. This perception was exemplified by Zaituni, an experienced teacher from Bondeni School, who confessed:

Not given the opportunity to teach the other subject I specialised in at the college is likely to make me forget many concepts resulting in my knowledge in that particular subject becoming outdated, considering that many new ideas continue to be generated of which I am not aware. Therefore, since I do not cognitively apply the knowledge which I got from college, I am likely not to teach effectively. (IT14)

Contrary to the expansion policy promise, certain teachers also claimed that initially new schools were established without sufficient numbers of teachers to provide teachers in all subject areas. To overcome this problem, the heads of schools forced some teachers to teach subjects which they had not specialised in during their pre-service teacher preparation programmes. This problem was reported to be more critical in rural-located schools, especially Nyikani and Bondeni Schools. These teachers worried that, because they had had no training in these subjects, they had to teach by solely relying on knowledge of the subject they had acquired in their secondary schooling. There were no teachers in that subject area for them to share professional experiences with. The interviewed teachers complained that when students failed their examinations, it was the teacher who was "questioned" and not those who assigned them to teach the subject. An example offered by Nyuki, an experienced teacher from Nyikani School, clearly illustrates this:

The Ministry of Education has posted me to this school to teach History which I majored in, but when I reported to the school, I was told that

since I studied from six with a HKL combination [History, Kiswahili and English Language] I would be well versed in English and Kiswahili. Therefore, I was assigned to teach English. Given this fact, do you think students will get the required content they need in English to pass their examination? (IT10)

This comment is a good example of how such teachers felt professionally compromised, unhappy and incompetent to teach subjects which they had not specialised in through their pre-service teacher education.

Teachers were also asked to describe the strategies they used to ensure that effective teaching and learning took place when class sizes were large and staffing was inadequate. In responding to this question, Mkude, a Biology and Chemistry teacher from Mafanikio School, commented: “Because of the large class size, whenever I give students assignments I use group work because I avoid giving individual assignments as this would require a lot of time in marking, hence failing to reach the set goal” (FG1). In a similar manner, Kiongozi said, “Due to large class size, I find myself forced to combine streams and teach them all together. The exercises set are carried out in group work” (FG1).

It was also mentioned in focus group interviews that, in order to simplify marking, teachers who taught large classes sometimes had the tendency to reduce the number of questions in examinations or compose tests or examinations that measure low levels of knowledge only. Kileo, the head of Chuoni School, offered this example: “A teacher who is supposed to give students an assignment with four questions would probably give only one question and sometimes never at all” (IT5). Mkude and Kiongozi were concerned that even if group assignments enabled students to learn from each other, regular use of it prohibited them from becoming independent learners. This practice was reported to be one of the reasons for the mass failure of students in science. Msaka, a Physics and Chemistry teacher from Nyikani School and Kibiki, a Mathematics teacher from Bondeni School, complained that the same authorities, who were aware of the problem of science teachers in their schools, “blamed” teachers for the mass failure of students (FG3; FG4). Such comments suggest that science teachers felt blamed for problems beyond their control and this disinclined them to further help students to learn and perform better in future. Overall, the present study’s findings suggest that science teachers felt that their

teaching effectiveness was undermined as a result of having a high teaching workload. In certain circumstances, a considerable number of science teachers believed that because of the lack of time for lesson preparation some of them lost the confidence to teach, and hence were viewed by their students as unprofessional.

5.1.2. Improving the quality of teaching

As also highlighted in section 5.1, during the enactment of the expansion plan, the government's target was to raise teachers' professional competencies with the overarching goal of improving their ability to effectively influence student learning. The expansion plan stated that this particular target would be achieved through initiating and implementing various up-skilling programmes and employing support staff. The policy also emphasised that there would be regular classroom teaching observations to help teachers further their careers. To accomplish this, the policy indicated that the government would increase the number of inspectors in each education zone as external feedback providers, and support the heads of schools as internal feedback providers. Careful analysis of my field data revealed, nevertheless, that teachers were discontented with the professional development opportunities available, feedback to enhance teaching practice and the adequacy of support staff to assist teaching or manage school administration. To a certain extent, moreover, this policy seemed to overlook matters pertaining to rewarding and recognising quality teaching, which was a central theme in most participants' responses. Each of these four issues is dealt with below.

Continuing professional learning opportunities

It could be inferred that the government was overwhelmed by the sheer number of teachers that needed to be provided with regular in-service training programmes. The respondents indicated that after reporting to their schools, both licensed and qualified teachers found there was limited in-service training that could enhance their professional abilities and, in turn, help them implement the curriculum more effectively. For example, these teachers recalled that in the years 2005, 2007 and 2010, enormous or major changes were introduced in the school curriculum. When asked whether they were prepared adequately to implement such changes, the respondents produced contrasting responses. Whilst science teachers declared that they had at least attended some seminars or workshops, humanities and social sciences teachers were adamant that such opportunities were rarely available to

them. The teachers believed that the inconsistency of these in-service programmes might have been due to budgetary deficits in the education system, because those who attended professional development opportunities always received allowances to help them to meet additional expenses incurred, and there was simply not enough money to go around.

Teachers who had the chance to participate in these programmes shared insights about how the programmes helped them feel successful in their professional life. In this regard, Jackson, an experienced teacher from Mafanikio School, remarked: “Although I attended the workshop only once, I was able to get clarification on certain topics that were complex to understand; we asked pertinent questions and clear explanations were given” (IT3). Riziki, a Biology teacher from Nyikani School, also mentioned that his involvement in in-service training following the curriculum changes improved students’ performance in his subject of Biology. He reported:

In the year 2013, I attended a seminar which intended to educate and encourage teachers to teach theory and practice concurrently. When I applied the knowledge I acquired from the seminar in my classroom, student performance in my subject rose from a ranking of 37 out of 40 schools in the district in 2013, to 19 out of 40 in 2014. (FG3)

While Riziki felt that the workshops and seminars implemented following the curriculum changes helped to enhance teachers’ teaching abilities, others offered a contrasting view. They complained that when curricular changes were introduced, usually one or two teachers were singled out to attend an orientation seminar, with the understanding that such teachers would train fellow teachers upon their return to school. Mwema, a Geography teacher from Nyikani School, expressed the concern that selecting only a few teachers to attend in-service training made teachers think that perhaps the government was not aware that it had a responsibility for the professional development of all those teachers it had employed (FG3).

What was evident from the interview data was that those teachers who lacked exposure to in-service training felt that their teaching and professional levels of knowledge in their respective domains were stagnating. To illustrate this, Zaituni, who had been teaching at Bondeni School for about 13 years, commented: “Due to the lack of frequent training I continue to teach the same content that I came with

on my first day of reporting here. Sometimes, I guess even this is diminished because I never get the opportunity to learn something new to replenish my knowledge deposits” (IT14). The comment made by Zaituni was echoed by Nyuki, who had been teaching at Nyikani School for about 16 years. He stated: “I am not up-to-date in my teaching because I have not attended in-service training for some time” (IT10). Such comments suggest that such teachers’ self-perceptions about their competence to influence effective student learning was diminished by a perceived lack of opportunities to meet with other teachers and exchange professional ideas.

The science teachers interviewed claimed that the time allowed for seminars or workshops was negligible when one considered the extent of the syllabus changes. This state of affairs forced facilitators to present their topics quickly and superficially. When prompted to express how this situation affected the teaching profession, many teachers replied that when they returned to their schools they failed to transfer what they learnt from these training sessions to their fellow teachers. Mkude, a Chemistry and Biology teacher from Chuoni School, typifies this view:

I remember one teacher from our school who attended a seminar on how to write “cross-cutting issues”, a section in the scheme work. On coming back, he would, in turn, orient us. Although that seminar required many things to be presented, instead of being conducted for a full month as scheduled; it was conducted in only two days. Now when the teacher came back, he told us that the teachers in attendance did not grasp the content properly because the facilitators were simply projecting slides without explaining what they were presenting. Therefore, they did not learn anything worthwhile. (FG2)

Furaha, an experienced Mathematics teacher from Mafanikio School, expressed a similar opinion and added that because of time limitation factors, facilitators were forced to cover the topics very briefly (IT4). For her, the coverage of huge amounts of content within a short time denied teachers the knowledge and skills they would get had they been exposed to such content over a longer period and were allowed time to engage in discussions with facilitators and other teachers.

It also appears that when changes were made to the syllabus, especially during the implementation of the expansion policy, facilitators were either partially or totally

ill-equipped to support teachers on how to implement the changes in the classroom environment. The teachers who actually had the opportunity to participate in some in-service training programmes claimed that sometimes the facilitators of these programmes were not particularly competent in presenting their material. In offering this opinion, Furaha affirmed that although seminars were sometimes conducted on how to teach “accounts” in Mathematics, they did not help teachers since the facilitators in those seminars were not accounts specialists (IT4). In a similar vein, Pendo, a Kiswahili teacher who had ten years of teaching experience at Nyikani School, remarked: “Since I was employed, I have attended a seminar only once, but it did not make any difference to me because the facilitators failed to answer questions we asked them about the changes initiated in the teaching syllabi” (IT11). Furaha and Pendo believed that the incompetence of many facilitators in these seminars left teachers continuing to teach according to what they knew, or to skip topics they thought they could not manage. This situation led to mass failures of students in National Examinations, something which made teachers feel “guilty” (IT4; IT11).

Mwavita, an experienced teacher from Chuoni School, Mkude, a Biology and Chemistry teacher from Chuoni School, and Disma, the head of Nyikani School, further explained that because of these failures some parents “pointed fingers” at teachers, describing them as teachers whose notable achievement was to fail students. This discouraged teachers from actively engaging in their profession. Such findings suggest that, on the whole, certain teachers, like some members of the community, viewed themselves as unprofessional in their work because of limited, consistently low-quality, in-service staff development that was an outcome of poor facilitation and a shortage of time. Because of this, teachers were deprived of opportunities to get first-hand information to potentially influence student learning to the best of their abilities.

Feedback to enhance teaching practice

In the course of both focus and individual interviews the respondents were asked whether school inspectors visited schools regularly and provided feedback about their teaching and the learning progress of students. In answering this question, all heads of schools and teachers complained that in the previous decade school inspectors had not regularly visited schools. The example given by Furaha, an

experienced teacher from Mafanikio School, supports this assertion: “I have been working here for more than ten years and during that time, the school inspectors have visited the school not more than three times” (IT4). A similar example was provided by Ngoma, the head of Bondeni School, who remarked: “Since this school started, school inspectors have visited only twice” (IT12).

The teachers interviewed were concerned, moreover, that even though school inspectors did not visit their school on a regular basis, whenever they *did* visit, they would inspect only one teacher from each subject. In addition, Kiongozi, a Mathematics and Physics teacher from Mafanikio School, and Igubike, a Geography and Civics teacher from Nyikani School, reported that when school inspectors came, they often looked at professional written documents, such as lesson plans and schemes of work, and thereafter give comments, but never entered classrooms to observe individual teachers teaching. Worse still, when they had finished inspecting these documents, they gave feedback to heads of schools detailing both strengths and weaknesses (FG1; FG3). It was observed that teachers did not like this kind of feedback because they were anxious that they might be judged based on what was reported. These teachers, instead, would have preferred to meet directly themselves with the school inspectors.

When asked how feedback presented in inspection documents affected teaching, Mwavita, an experienced teacher from Chuoni School, observed: “To some extent, these comments help to improve the written documents such as lesson plans and scheme of works; however, the same cannot be said about practical classroom teaching” (IT8). Furaha, an experienced teacher from Mafanikio School, differed from Mwavita in remarking: “Feedback in the documents is important because they go hand in hand with some advice related to changes in and implementation of the curricula” (IT4). It is possible that Mwavita did not fully realise the importance of feedback presented in inspection documents, because she had never had the chance to interact with school inspectors. By contrast, Furaha appreciated such feedback because she had had opportunities to interact with inspectors personally. Overall, this finding implies that the provision of written feedback in inspection documents without inspectors personally meeting with teachers limits opportunities for teachers to ask questions about areas in which they require more clarification. Subsequently, there is a danger of teachers remaining static professionally and less

capable of implementing proposed changes to the high level that is expected of them.

It would appear that some teachers relied on external inspection in order to perform their work. This was evident when three out of 30 respondents interviewed argued that regular school inspection visits kept teachers committed to their profession in terms of attendance, punctuality, and the preparation of work. They were more likely to arrive at classrooms on time and not absent themselves from their work stations. In the light of this, Jackson, an experienced teacher from Mafanikio School, was concerned that a lack of inspection over a long period of time was not good as it led teachers to “neglecting” their daily duties. He concluded by stating: “It is only when teachers are inspected often that they are made aware of all their professional duties, therefore inspiring them to carry out their activities as required” (IT3). Jackson’s views were shared by Mhidze, an experienced teacher from Bondeni School, who remarked: “In our school, teachers started preparing the professional documents after they got information that the school inspectors would be coming to visit their school. This was not practised in former years because the teachers knew no one would come to visit them” (IT13).

In his interview, Kileo, the head of Chuoni School, linked poor student achievement with the infrequent visits of school inspectors. He stated: “I am telling you, if the inspectors were able to visit schools as often as they could, teachers would teach effectively and positive academic results would be realised” (IT5). He ended his comment by remarking: “I think this mass failure which overwhelmed our schools in the recent past may partly be attributed to the inadequate school inspection.” In a nutshell, such comments suggest that some respondents viewed at least some of their colleagues as not performing up to standard and that the situation was not helped by infrequent inspectorial visits, because this encouraged a more relaxed attitude in these teachers. Even those who started off intrinsically motivated to teach lapsed, in this view, into being mediocre teachers. However, it might also be suggested that teachers’ high reliance on external monitoring is evidence that school-based support mechanisms were failing.

Where individual teacher interviewees argued that school inspectors were important players in shaping a range of matters related to their teaching, teachers who

participated in focus group interviews tended to contest this view. They claimed that these authority figures generated “tension” amongst teachers. When asked about how inspectors create tension, Mgosi, a History teacher from Chuoni School, replied: “Whenever these inspectors come, they never inform us prior to their arrival. Even when you meet and ask them to help you with something so as to improve your teaching, they never help you. Instead, they have this tendency to intimidate teachers so as to induce fear instead of being a source of help” (FG2). This view was echoed by Mkude, a Chemistry and Biology teacher from the same school (Chuoni School), who offered this example:

In the scheme of work for her subject, an item called “assessment” has been added to the category alongside “tools”. Teachers are now uncertain which word to use out of the two since these inspectors never tell us anything about the meaning and differences between the two items. (FG2)

It was also clear from the narratives that, although the government was aware that resources to enable zonal school inspectors to visit all schools were scarce, there was a view that little effort had been made to equip and empower heads of schools to enable them to take on the inspection role, including observation of classroom teaching, in order to improve the quality of teaching and learning. Again, this was seen as impacting both on their professional roles as teachers and their personal competencies. Mwamwezi, a Chemistry and Biology teacher from Bondeni School, associated the lack of classroom observation by the heads of schools with student learning outcomes. She backed up this opinion thus: “A teacher might be teaching in a poor way, but because there is no one to evaluate him or her, this goes on until it reveals itself in the poor performance of students”. She was worried that because of this the school may conclude wrongly that the problem is with the students, where in actual fact it is “we teachers who might be having some problems with our teaching which need to be rectified” (FG4). Similarly, Mhidze, an experienced teacher from Bondeni School, maintained that the decision of the heads of schools not to evaluate teachers’ performance had resulted in teachers perceiving their teaching task as “optional” and that teaching is not a “serious” profession that needs to be executed daily through adherence to core principles. He concluded that because of this, some teachers teach with a “business as usual mentality” –

something which is likely to negatively affect the academic progress of the school (IT13).

What came through in the focus and individual interviews was that, although the heads of schools did not enter classrooms to observe teachers, some of these heads of schools were inclined to engage in outdoor monitoring (walking around and looking through windows) or looking at class journals to ascertain which teachers worked consistently and which did not. The teachers expressed a variety of perspectives about how outdoor monitoring might influence the processes of teaching and learning. For instance, Mikogo, a Civics and General Studies teacher from Mafanikio School, remarked: “Outdoor monitoring is good because it encourages teachers to attend all lesson sessions” (FG1). Itowa, a Kiswahili teacher from Chuoni School, however, was against this mode of inspection because it sometimes “upsets” teachers and can, therefore, contribute to a loss of “confidence” in their teaching abilities (FG2).

Wililo, the head of Mafanikio School, and Kileo, the head of Chuoni School, gave reasons why they used class journals as a way of monitoring teaching and learning processes. They both mentioned that in the journal there is a section which requires teachers to sign off their teaching duties on a daily basis with students as witnesses. Teachers were also required to specify the topic they taught and the kind of activities they gave to their students. Therefore, these heads of schools affirmed that they always used class journals to monitor the pace at which teachers teach, because some teachers may go through the topics in the subjects they are teaching too quickly so as to finish the syllabus and get some time to relax. These comments suggest that these two techniques used by heads of schools serve only to improve teachers’ class attendance and don’t necessarily develop effective teaching practices.

In short, this investigation suggests that in the schools studied, feedback to enhance teaching practice was perceived by the teachers to be problematic, therefore hindering them from gaining professional experiences necessary to increase their sense of competence to develop and implement new approaches to lesson preparation and teaching.

Rewarding teaching excellence

The teachers in this study expressed the belief that on average a teacher should be considered for promotion every three years. They were, however, concerned that there were inconsistencies in the way promotion was being implemented, with some of them getting promoted on time and others not. They were concerned that while promotion for some teachers was being put into effect within three years, some teachers had not been promoted for more than six or seven years. Both heads of schools and teachers emphasised that this chronic delay in promotion had adverse effects on teachers' work performance, because these promotions were always accompanied by an increase in salary. This meant that when teachers were promoted on time, their salaries remained the same throughout that period. Teachers stated that inconsistent promotion practices meant it was possible to find teachers who had been newly employed getting the same salary as long-serving teachers, because the former were promoted on time as they should have been. It was also noted that although some teachers were regularly promoted, this promotion did not go hand in hand with the required salary increase because this takes two to three years to come into effect. Given that promotion was associated with a salary increase, the inconsistency and/or delay in promotion might suggest that the government was overwhelmed by the burden of the large number of teachers it employed in the wake of the rapid increase in secondary schools.

In interviews, teachers regularly made reference to their belief that civil servants in other government institutions were promoted and paid at the right time. Consequently, a number of respondents claimed that delays in promotion and the time lag between promotion and salary increases led teachers to develop a notion that they were "segregated", "uncared for", "suppressed", "unrewarded", and not "recognised" or "valued" by the government. This situation, in turn, led them to perceive the teaching profession as something "worthless" and "undesirable", thereby creating feelings of discouragement. These feelings, these teachers believed, made teachers teach with less zeal and commitment. Kihombo, an experienced teacher from Mafanikio School, observed that this discouragement sometimes expressed itself in passive resistance, where teachers deliberately and silently underperformed in their duties, because they thought it made little difference whether they worked hard or not, since they never got promoted on time

(IT2). This perception was shared by Mwavita, an experienced teacher from Chuoni School, who stated: “Delays in getting promoted make me cherish some idea that I should teach proportional to what I am paid”. She commented that, “Although at times I feel like regaining my momentum to teach, whenever I think of that, I feel that I have been unjustly treated, therefore losing again my motivation for teaching” (IT8). When interviewed, Pendo, an experienced teacher from Nyikani School, shared how she reacted after finding out that, although she had worked hard, no one appeared to appreciate and recognise her efforts through promotion. She offered this anecdote:

While my employer seemed reluctant to promote me, I was assigned to teach Form Four A National Examination class. I made sure students performed the poorest in the subject I was teaching. For sure this is what happened, because region-wise the subject was ranked 141 out of 141 schools. I deliberately decided to do so after seeing that I was not promoted, which implied that I was not working. Therefore, I did that to make them realise that I was not working according to what they perceived of me. Even when the results came out, bad as they were, no one came forward to ask me anything because they knew it was entirely their fault. (IT11)

This example shows vividly how delays in promotion can prompt anger in some teachers, which has a telling effect on the quality of education delivery and student performance in particular. Overall, those teachers who expressed their views on this theme implied that because of promotion problems teachers became demoralised and reluctant to develop good-quality teaching practices and seek resources for use in facilitating students’ knowledge and skills.

Another finding was that the impoverished life teachers lived as a consequence of promotion and salary advancement problems contributed to the teaching profession losing its “importance”, “respect” and “reputation”, both within the profession and in relation to society at large. Some teachers went on to explain that, whereas people are proud to be identified with other professions such as engineering and medicine, it is different with the teaching profession, because people are “not happy” to be associated with it owing to a perceived lack of respect from others. Huruma, a Chemistry and Biology teacher from Chuoni School, shared this example: “When I said I was going to join the teaching profession, my relatives were surprised. They

advised me that I would be better to sell tomatoes at the market rather than join the teaching profession” (FG3). In a similar vein, Hongoli, a Civics teacher from Bondeni School, commented: “The contempt with which the teaching profession is held discourages us wherever we may be; we are not comfortable to identify ourselves as teachers”. She further stated, “Whenever we are asked about our profession, we always lie or cheat by mentioning other professions because we fear that if we say we are teachers we are sure to be looked down upon by others” (FG4). Some teachers claimed that since promotion and payments were such thorny issues, they sometimes thought of quitting the profession. Mwamwezi, a Chemistry and Biology teacher from Bondeni School, remarked:

I usually reflect on the work I do, that is going around all classrooms when teaching, and then when I think critically, I realise that the salary which I get is not commensurate with what I do. This realisation generates stress in me, where I think of going to upgrade my knowledge and skills in another field, with the expectation that I quit the teaching profession on completion so that I can think of getting another job. (FG4)

These comments suggest that promotion issues and other associated problems facing teachers led them to feel despondent owing to perceptions of the profession in the wider society.

It also became apparent that promotion issues were believed by some to contribute to the loss of perceived professional integrity among teachers. Some data indicated that some teachers did not believe they received reasonable salaries because of the chronic delays in promotion, so that most of their basic needs went unmet. As a consequence of this, certain teachers confessed that they left early from their work stations to engage in other activities aimed at generating money to make ends meet. For example, Kileo, the head of Nyikani School, stated: “Although teachers would wish to enter classrooms during extra time in order to help students, they won’t do so. Instead, they will be thinking of going to work somewhere to make up for the deficit caused by their small salary” (IT5). As a case in point, Mwavita reported that the delay in salary after promotion opened up “possibilities for me to engage in teaching tuition, part-time teaching in some private schools or engaging myself in some business” (IT8). Mhidze, an experienced teacher from Bondeni School, added that given this state of affairs, it was proving to be a hard task for heads of

schools to effectively manage this generation of teachers, because many of them had entrepreneurial dispositions geared to making them overcome various challenges in life (IT13). Since a number of teachers used most of their time looking for alternative means to supplement their income, they did not concentrate on the lesson preparation required for effective teaching.

Supporting staff to assist teaching/learning and running the school

Evidence from interviews and focus groups indicated that the newly-built schools opened without appointing key non-teaching personnel such as laboratory technicians and accountants. It was suggested by some respondents that since these schools did not have such personnel, the tasks had to be undertaken by teachers whose primary role was to teach. Teachers complained that having to assume additional tasks apart from their actual professional responsibilities had a negative impact academically, because it took time away from teaching preparation. They stressed that the lack of authentic lesson preparation might lead teachers to a loss of professional competence in influencing effective student learning. The heads of schools and teachers interviewed offered examples, which demonstrated how the multiplicity of tasks for a teacher, who also performs an accounting role, affects teaching and learning processes. Pendo, an experienced teacher from Nyikani School said: “A teacher who works as an accountant is required to prepare accounts ready for auditing and take cheques to and from the district headquarters. She was bothered that during this entire time the teacher would not be able to teach” (IT11). Similar thoughts were revealed by Disma, the head of the same school (Nyikani School), who stated, “The teacher/accountant is supposed to teach, but at the same time he or she is required to collect fees and other contributions from students” (IT9). This suggests that multiple non-teaching roles, which teachers are asked to perform, cause constant fatigue. To a certain extent, findings suggest, too, that teacher/accountants felt confused about their roles: were they accountants or classroom teachers?

The teachers were concerned that accounting is a profession; therefore, it is possible for a person who is not a professional accountant to make errors. In this regard, Jackson, who was a teacher/accountant in Mafanikio School, voiced his concern that when this situation happened, the teacher/accountant might become completely “upset” trying to figure out what to do to compensate for possible losses. These

teachers became psychologically “frustrated” and thus unable to engage effectively in teaching (IT3). It was evident from the data that the main function of heads of schools was viewed by participants as planning, organising and coordinating matters related to teaching and learning for academic excellence in the school. The heads of schools were afraid that since the nominated teacher/accountants lacked professional knowledge of accounting, they did not properly handle the duties entailed. Therefore, the heads of schools were obliged to supervise accounting procedures so as to ensure accuracy. Ngoma, the head of Bondeni School, complained:

The head of school is looked upon as the school leader. However, for me this role is extended to being involved in matters related to accountancy, store-keeping and others. Very often, you find that instead of the school accountant preparing the monthly or quarterly report, it is me who has to do that. Due to having so many responsibilities to attend to, very often, I find myself misplacing some reports and documents. (IT12)

The above observations suggest that some heads of schools are confused about the exact nature of their role. Their professional identity is confused: are they accountants or overall school academic custodians? This situation, consequently, results in heads of schools feeling uncomfortable about exercising their professional authority.

Among science teachers, there was a commonly expressed view that science teachers who were performing their role of teaching alongside doing tasks more properly done by technicians were likely to be less efficient and effective in delivering quality education to their students. These teachers believed that, owing to the lack of laboratory technicians in schools, science teachers had to ensure that all resources crucial for experimentation were in place. In this regard, Riziki, a Biology teacher from Nyikani School, expressed a concern that even though he had to devote much of his time doing activities unrelated to his professional role, he had no incentive to do so. He remarked:

When I want to teach the practical component of the lesson, I have to prepare the specimen although I cannot claim to know the work properly because it is not my profession. As a professional teacher, my task is to prepare a lesson and teach, but instead of doing only that, I

find myself using much of my time preparing equipment for the practical lesson. Despite doing this, my efforts go unrewarded bearing in mind that I am doing an extra job completely not related to my profession. (FG3)

Such a complaint has two implications. First, Riziki felt conflicted between performing a laboratory technician role and teaching his subject. Secondly, he was professionally disappointed as a result of being unrecognised by the government for performing non-teaching duties. In brief, findings suggest that the lack of government commitment to employing supporting staff to assist schools and their teaching programmes has the potential to put the professionalism of teachers at risk.

5.2. School infrastructure

The importance of school infrastructure in making a difference to teaching and learning was also acknowledged in the expansion plan. The policy stated that housing supplements and work spaces would be provided for teachers in each of the new schools. However, an analysis of field data suggested that the promises related to housing and offices for teachers in the school expansion plan had not been acted on, at least in the schools studied in this investigation. The views of teachers in relation to each of these two topics are reported on below.

5.2.1. Teacher housing

Housing for teachers in the newly established schools was seen as impacting on the professional life of teachers. Findings related to an analysis of relevant data are presented under two subheadings, one of which addresses community perceptions of the teaching profession, and the other which reports on housing options and the impact of this on teachers' capacity to teach.

Community perceptions of the teaching profession

The absence of housing facilities on school campuses resulted in teachers renting houses or rooms off school premises. In interviews, a number of teachers declared that these rooms or houses were often of inferior quality either because of the nature of the environment or their personal circumstances. In their view, most of the houses in rural areas, where some schools were located, were below standard due to the lower socio-economic conditions in rural areas. However, three teachers interviewed from Chuoni School (an urban located school), mentioned that they

opted to rent sub-standard houses because of their responsibilities to their large families, and their inability to afford good-quality homes since they were not paid well enough to afford them. These teachers were worried that living in the poor-quality houses they rented affected their status as teaching professionals in the eyes of the students they taught and the perceptions of the wider society. For example, Mkude, a Chemistry and Biology teacher from Chuoni School, offered this anecdote: “One day I was walking along a certain street with one of my students. This student told me, ‘Sir, teacher X lives in this house. That house is of low quality, not worth the respect and title of my teacher’. I felt very bad on learning that” (FG2).

Similarly, Mhidze, an experienced teacher from Bondeni School, remarked:

Seeing us living in mud-walled houses or rooms make parents perceive education as valueless for their children. This situation causes them to discourage their children from working hard academically and entering the teaching profession. And when we ask students which career they would like to pursue after completion of their studies, no one mentioned the teaching profession. The poor houses we rent are probably among the factors which affect their choice of career. (IT13)

When interviewed, Mtendzi, an experienced teacher from Chuoni School, and Zaituni, an experienced teacher from Bondeni School, also reported that the low quality of houses, which often had the poor latrines, made them feel like they were “prisoners in a jail” – something which exposed teachers to “shame” and “ridicule” from their community. This contributed to teachers’ perceptions of their profession as undesirable (IT7; IT14). Nyuki, an experienced teacher from Nyikani School, further illustrated this with the comment that “owing to the nature of houses we are living in, the community we interact with has come to the point of despising the teaching profession by developing a perception that if we were employed as professionals in other fields we would be able to rent good houses” (IT10).

In conjunction with the low quality of housing, teachers claimed that renting off school premises was a challenge since students coming from distant villages sometimes rented rooms and communal spaces in the same buildings in which these teachers lived. These teachers raised a concern that sharing accommodation with students was professionally unbecoming as students knew about their teachers’ lifestyles – something which resulted in teachers feeling “embarrassed” and

“withdrawn” in front of students. Of the four heads of schools interviewed, two indicated that living in close proximity to students increased the level of temptation for certain male teachers to engage in unethical acts, such as sexual relationships with students. According to them, the behaviour of a few teachers was painting a bad picture of the teaching profession as a whole in the wider community.

Mwamwezi, a science teacher from Bondeni School, spelled out a rationale for teachers residing on school premises. She commented: “If teachers had accommodation facilities within the school, it would give us enough time to prepare our lessons as we are supposed to. If teachers prepare well, they can also teach well and therefore students will perform and pass examinations. Parents will also appreciate teachers and give them the respect they deserve” (FG4). Furthermore, Kileo, the head of Chuoni School, argued that good student performance not only enhances public respect for the teaching profession, it also enables teachers to gain the professional trust of their students and the teachers of other schools (IT5). Mikogo, a Civics and General Studies teacher from Mafanikio School, suggested that an increased “respect” and “trust” might make teachers more “cheerful” and “proud of” the result of their teaching, and feel “intelligent” (FG1). Generally, findings suggested that teachers believed that their status had diminished as a consequence of the community and the government paying scant attention to this issue and making little or no effort towards establishing appropriate housing for teachers within school premises. This situation resulted in teachers feeling inferior viz-à-viz the wider society, hence undermining their overall self-efficacy as teachers (as will be discussed in Chapter 6).

Housing options and the impact on teachers’ “readiness” to teach

Despite being aware of the shortage of houses in schools, the government seemed to overlook the allocation of renting allowances for teachers during the establishment of the new schools. Of the 30 teachers interviewed, 17 complained that renting houses or rooms off school premises placed a financial strain on them, because they had to meet the cost of house rents that continued to rise while their salaries remained low. They stressed that when they were out of money and the rent was due, house owners often harassed them, including evicting them out of their houses – something which affected them psychologically. Zaituni, an experienced teacher from Bondeni School, commented that being “evicted” from the houses

they rented because they were unable to meet payment deadlines made teachers think that their employer did not “care” about them (IT14). Wililo, the head of Mafanikio School, concluded that this situation detrimentally affected the “mood” of teachers with regard to their work (IT1).

In developing the school expansion plan the government also appeared to neglect transport options to ensure teachers could easily access the schools they were working at. Together with the domestic and financial implications brought about by the need to rent houses or rooms, a number of teachers from Nyikani and Bondeni Schools also faced challenges related to the long distances they were required to travel between their homes and their schools, as many teachers did not have their own car or bicycle. The teachers mentioned that although in some areas there were private buses, which passed near the schools, this kind of transport was unreliable. As a result, of the 30 teachers interviewed, eight indicated that they or their colleagues walked more than six kilometres on foot to get to school. In their interviews, Nyuki, an experienced teacher from Nyikani School, and Zaituni, an experienced teacher from Bondeni School, shared a wide range of experiences about how the walking distance they covered to and from the school compromised the quality of their teaching. They pointed out that since they rented houses a long way from the school, they often arrived at school late and returned home “tired” hence they failed to prepare their lessons properly. This situation compelled them to rush to classrooms and teach students under “tense” conditions (IT10; IT14). Ngoma, the head of Bondeni School, maintained that when teachers continually arrived late, many of them failed to complete topics prescribed in the syllabus. He further noted, “If they do manage to complete the syllabus, they will have rushed through it, therefore failing to teach students effectively” (IT12).

It would seem that the long distances to and from school exposed more female teachers to aggression and danger compared with their male counterparts. For some these concerns made them live, walk and work in “fear”. This trend was more prevalent in Nyikani School than other schools studied. In the focus group interviews, for example, the female teachers from Nyikani School claimed that because they had to walk seven kilometres between their homes and the school, they usually got up early in the morning and walked in groups with male teachers to avoid being assaulted or raped. Related concerns were also evident in an

interview with Disma, the head of the same school (Nyikani School), who remarked, “When teachers come to school, they have to pass through a dense forest, which may be dangerous for them as they can be bitten by poisonous snakes, raped or assaulted by hooligans” (IT9). Pendo, an experienced teacher from Nyikani School, demonstrated the psychological impact of assault on female teachers when she remarked: “If we become victimised, we feel dehumanised and as a result, our confidence to teach will get worse” (IT11). The respondents’ views expressed here suggest that Nyikani School was not a safe place for female teachers to teach at.

Disma and Pendo affirmed that living far away from school was a big challenge that adversely affected teachers’ ability to teach extra classes to improve the academic achievement of their students, as scheduled by the school or the teachers themselves. Disma elaborated:

It is impossible for the teacher to live seven kilometres away from the school, then think of teaching remedial classes. Teachers may be in the mood to teach after hours, but when they think about the distance they have to walk from school to where they live, they automatically become discouraged and refrain from doing so. (IT12)

In addition, Kileo, the head of Chuoni School, remarked that, “Since teachers live very far from their school, it is impossible for them to carry a load of students’ exercise books home to mark” (IT5). Given this impossibility, Kileo emphasised that, “Even if the teacher is committed, he or she may get discouraged and when that teacher goes back home, he or she may resort to drinking alcohol to alleviate work-related stress, therefore adding further to negative public perceptions of the teaching profession”. This comment from Kileo suggests that the scarcity of housing facilities within school premises compromised the willingness of teachers to participate fully in performing their professional duties.

5.2.2. Teachers’ spaces

Out of 30 teachers interviewed, 19 were concerned that in the construction of new schools much of the focus of the government, and of the community in particular, was placed more on meeting the needs of students than of teachers. These teachers, for example, commented that the first priority in schools’ physical construction was how many classrooms were to be built and not where teachers would work. Consistent with this, Disma, the head of Nyikani School, remarked: “We keep on

wondering: if the government and the community can manage to build classrooms for students, why not teachers' offices?" (IT9). The respondents mentioned that the lack of government focus on establishing such infrastructure led teachers to feel professionally under-supported, and thereby less motivated to teach.

The respondents made it clear that since their schools were built without offices, some classrooms had become teacher 'offices' where teachers worked in a shared space. In the focus group interviews, teachers from Bondeni School were, however, anxious about the condition of these spaces because they lacked lined ceilings. Most notably, Hongoli, a Civics teacher from Bondeni School, said that this resulted in noise interference from nearby classrooms, especially when classes were in progress (FG4). This concern was reported as one among the major factors disrupting teaching preparation, because it meant that teachers lost concentration. Ngoma, the head of Bondeni School, concurred with this view, commenting, "As you see, because my office is between classrooms and there is no ceiling, it is impossible to have decent conversation above the noise. Sometimes I do not see where my respect as a school head is" (IT12). This suggests that at least some teachers found their work conditions un conducive to effective teaching.

During the interview sessions, the teachers were also asked to clarify the extent to which sharing one room as a workspace affected teaching and learning processes. These teachers said that the tendency to have a large number of teachers sharing one office distracted them in preparing lessons. They noted also that it was difficult to produce permanent teaching and learning materials because they lacked a place to store them. As Furaha (an experienced teacher from Mafanikio School) commented, "If I had an office, I would ask the school to buy for us different teaching and learning resources because I would have a proper storage place" (IT4). Whilst teachers described how the lack of offices affected their teaching preparation, the heads of schools insisted that the lack of these facilities led teachers to feel "unsettled" in the school environment. This state of being unsettled forced many teachers to go home early on the pretext of lacking a place to prepare their lessons or perform other professional duties, thus restricting students' access to academic advice and guidance. There was a suggestion here that teachers used the lack of office space as an excuse not to engage in the development of materials that would help students in their learning.

Teachers also related how the absence of offices hampered their professional growth and impacted negatively on the learning of their students. On the one hand, Mwavita, an experienced teacher from Chuoni School, argued that “sharing one classroom space as an office provides more opportunities for professional dialogue among teachers” (IT8). On the other hand, Itowa, a Kiswahili teacher from Chuoni School, claimed that working in an open, shared space because of a lack of subject-specific offices or resource rooms meant that teachers failed to share professional ideas with colleagues who taught the same subject (FG2). Itowa believed that in subject-specific, departmental offices teachers found the opportunity to express and discuss the challenges they encountered when teaching certain topics. A comment made by Riziki, a Biology teacher from Nyikani School illustrates this point: “I am a teacher, fine, but I cannot claim to be perfect in everything. I may be smart on some topics but poor in others; therefore, a proper arena to express my thoughts is through the department office” (FG3). In this regard, the views of Mwavita and Riziki suggest that although some teachers were interested in learning from each other, the lack of departmental offices constrained them from meeting to devise strategies to improve their professional knowledge and skills for promoting student learning.

In addition, teachers referred to the negative impact of the lack of separate offices where teachers and their students could discuss behavioural matters. Ngoma, the head of Bondeni School, for example, noted, “The lack of a discipline department office makes teachers lack a place to discuss private behavioural issues related to parents and students in order to improve academic achievements of learners” (IT12). In a similar way, Igubike, a Geography and Civics teacher from Nyikani School, stated: “Most students are at the critical moment of growing where, because of constant changes in their behaviour, they need close monitoring and guidance” (FG3). She feared that the lack of a discipline office meant teachers might fail to address confidential and serious matters involving students. Overall, the respondents believed that the lack of work-spaces was an obstacle to teachers performing their roles and developing themselves professionally.

5.3. Resources for teaching

The provision of good quality books, equipment and chemicals to enhance effective learning was emphasised in the expansion policy. However, teachers were blamed and labelled as “incompetent” and “unprofessional in their job” when students completed their education without relevant knowledge and skills. As will be seen, respondents related this situation, in part, to a lack in resourcing. Two topics related to resources for teaching arose from my analysis of the data: appropriate textbooks, and laboratory practical materials. These sub-themes are reported on below.

5.3.1. Appropriate textbooks

The heads of schools and experienced teachers complained that the critical shortage of books, which arose during the implementation of the expansion plan, provided an opportunity for groups of individuals to start writing books themselves and to sell them in schools. In both individual and focus group interviews these teachers referred to differences between such self-published texts and those supplied by the government (official texts) before the increase in secondary schools. They noted that the former were written in such a way that they required both the teacher and the student to read between the lines in order to understand a given concept. Jackson, an experienced teacher from Mafanikio school, and Mtendzi, an experienced teacher from Chuoni School, approved of the approach of these official texts as helping to stimulate the students’ intellectual capacity since they had to read then extract a point after thinking critically and organising their ideas logically (IT3; IT7). They, however, challenged certain theoretical aspects of the self-published texts for the reason that these books were too condensed and provided examples that did not require critical thinking on the part of the students. These books were therefore limited in their usefulness to teachers. Disma, the head of Nyikani School, argued that if these books were placed strictly in the Bloom Taxonomy of Educational Objectives, they would be ranked at memorisation and recall aspects only (IT1). He highlighted this example:

I was examining a physics book on a topic called “Friction Force” where I found a few explanations followed by some questions. In order for such a book to qualify as a good textbook, it should first give detailed and thorough explanations before the questions. (IT9)

Tembo, an experienced teacher from Chuoni School, and Pendo, an experienced teacher from Nyikani School, were surprised that instead of these self-published texts being used as reference materials, they were used as textbooks (IT6; IT11). The teachers declared that even though they were aware of the weaknesses of these books, they were using them because they had no way of getting other books which could help them in their teaching.

The respondents expressed a range of views about how the abridged books affected the intellectual development of learners. Furaha, an experienced teacher from Mafanikio School, argued: “The nature of these self-published texts curtails the ability of students to work out solutions for mathematical tasks because they rely on the worked-out examples, not realising that a solution or correct answer to a mathematical question can be arrived at in many ways and not only one procedure” (IT4). This idea was also expressed by Mwema, a Geography teacher from Nyikani School, who stated, “Since everything was worked out in these books, students learn by memorisation” (FG3). Sanga, a Kiswahili teacher from Mafanikio School noted, “Books containing summarised contents not only failed to impact on students, but also compromised the academic capability of teachers, since many of them no longer prepared their lessons; they rely on these books which already have a written outline form” (FG1). Nyuki, an experienced teacher from Nyikani School, was concerned that using self-published texts written in a summary form portrayed teachers as ineffective and lacking professional competence (IT10). In brief, such findings suggest that the experienced teachers were of the opinion that self-published texts containing content summaries from other original texts stifled the opportunity for teachers and students to practise the skills of analysing and summarising and this, in turn, reduced their ability to frame persuasive arguments.

5.3.2. Laboratory practical materials

The science teachers interviewed believed that effective science teaching required exercises and practical activities to enhance effective student learning. However, they claimed that the critical shortage of laboratory resources resulted in their teaching students in unsuitable, poorly equipped spaces. In particular, Riziki, a Biology teacher from Nyikani School, complained, “You might find that the school has only ten beakers whereas there are 80 students. Given the limited number of available equipment and the high number of students, how is it possible to conduct

a sound experiment?” (FG3). When asked to mention the strategies they employed in promoting learning in such difficult situations, most science teachers replied that they always conducted experiments by involving students in groups. These teachers stressed that although effective laboratory practice calls for the number of students per group to be no more than five, the shortage of laboratory resources compelled them to have groups of more than ten students. They were concerned that such large groups of students prevented teachers from properly supervising the conduct of experiments. Therefore, because of the shortage of laboratory resources, teachers felt they could not do their jobs effectively, which had a far-reaching impact on students.

It was also noted that whilst some teachers involved students in groups to share laboratory resources, other teachers simply did not attempt to teach topics which required specific equipment that was unavailable. Teachers felt that teaching the topics verbally without the use of equipment would be too challenging for students to master; hence they omitted the topics completely. This meant that students faced difficulties when they sat National Examinations because of the risk of encountering topics they were unfamiliar with. Since the National Examinations required each student to conduct experiments on their own, it was believed that performing experiments in groups deprived students of the opportunity to learn and practise relevant skills independently. The scarcity of resources meant that the majority of students were able to learn only by hearing and observing, while lacking the opportunity to learn by touching and doing, which are also important aspects of gaining and retaining knowledge. The respondents indicated that as a result of under-resourcing and students failing their national examinations, teachers were being “accused” of not providing students with appropriate knowledge and practical skills.

The teachers also made the point that since most of the laboratory chemicals and equipment were intended to be used in relation to the National Examination only, one might encounter students who had never seen any equipment and came into contact with it only when sitting National Examination topics. Disma, the head of Nyikani School, spoke at length about how the lack of these resources affected students when they came across the National Examinations. He offered this example:

In this “Chemistry book,” there is the topic, “luminous and non-luminous frames”. During the National Examinations, students are usually asked to draw and label its parts. This is like torturing them because they will not have seen the Bunsen burner let alone know how it is lit. It would be different if such learners had seen it and practised lighting it before the examination. Because the learners will not have seen it, the only option for them is to draw it by solely relying on the theoretical explanations given by their teachers during classroom lesson; thus, drawing something which is not perfect. (IT9)

Comparable sentiments were expressed by Geography teachers across all of the schools studied, who consistently offered the example of “survey” – a topic in Geography. They insisted that in the Geography National Examination all the questions related to survey materials were compulsory, and students were required to describe these materials and show their functions. These teachers were nervous that students were asked to describe objects they had never seen nor used in practical activities, hence making it difficult for them to identify and describe them under examination conditions. This idea was shared by Pendo, an experienced teacher from Nyikani School, who stated:

Due to the lack of Geography equipment, you may be teaching chain survey but you find that the students have never seen the chain nor can they tell what it looks like. This situation adds difficulties in teaching because teachers use more effort in trying to explain theoretically to students what such materials look, how they are used, and for what purpose. (IT11)

Msaka, a Physics and Chemistry teacher from Nyikani School, explained that, owing to the shortage of material resources, teachers lost the skills they formerly had, therefore making them feel “intellectually inferior” (FG3). Such comments certainly suggest that the shortage of laboratories and appropriate equipment and resources was seen as resulting in the diminution of perceived professional competence and confidence of teachers in their subjects of specialisation. This subsequently led teachers to lose the pedagogical expertise acquired during their pre-service teacher education.

5.4. Relationship with the community

In an endeavour to minimise bureaucracy in decision-making and encourage community participation, the secondary education expansion policy paid attention to management reforms by devolving most of the operational functions of a school from central to local levels. The government viewed this as an effective way of encouraging the wider school community, particularly parents, to offer their physical skills to help build classrooms or provide other services geared towards the enhancement of effective teaching and learning. The parents and broader community, nevertheless, demonstrated differing responses towards supporting the newly established schools. Whilst community organisations (Governmental and Non-Governmental Organisations) were committed to assisting the schools to realise their goals, parents reflected a more passive degree of cooperation in their engagement with and contribution to the new schools. This somewhat negative parental response was seen as having a direct impact on teachers' professional lives, as will be evidenced below.

5.4.1. Parental involvement

It would seem that although the government was intent on investing in new schools, the expectations of parents to contribute was not effectively communicated. This was apparent in the interviews, as both heads of schools and teachers raised the concern that when invited to attend meetings to discuss various matters pertaining to school and student welfare, the majority of parents never turned up. A number of respondents were prepared to discuss how interactions between teachers and parents affected the work of teachers. Kileo, the head of Chuoni School, for instance, commented: "I believed that if teachers and parents meet regularly, there would be a two-way follow-up of student academic development, that is, the parents at home and the teachers at school both doing the same thing" (IT5). Mtendzi, an experienced teacher from Chuoni School, echoed Kileo's views by elaborating, "When the children go back home from school they meet with their parents. Now if the parents have a close relationship with their children, such children will spend time studying" (IT7). Mtendzi and Kileo, nonetheless, complained that this idea was not translated into action because, when meetings were convened, many parents never attended. Msaka, a Physics and Chemistry teacher from Nyikani School, and Hongoli, a Civics teacher from Bondeni School, expressed a concern

that, because of the low turnout of parents at meetings teachers were denied the opportunity to get first-hand information about student learning habits outside the school environment. Such opinions from respondents suggested that poor attendance of parents at school meetings compromised teachers' understandings about how the home environment affected student achievement and engagement.

In the course of interviews, three out of four heads of schools described how parents' participation in meetings impacted on student academic performance. Disma, the head of Nyikani School, for example, remarked: "In my investigation I realised that those students who generally perform poorly are those whose parents never turn up in the meetings and they never cooperate with teachers" (FG2). Wililo, the head of Mafanikio School, insisted that those parents who were disinterested to attend these meetings were the ones who "lament" or "blame" the school and teachers when their children fail or perform poorly in examinations. This accusation resulted in teachers feeling less "appreciated" for the hard job they were carrying out (IT1). However, Kileo went on to acknowledge that although many parents did not attend these meetings, those few who turned up helped teachers by offering them very "constructive advice" related to improving teaching. This took place during teacher-parent meetings when teachers gave feedback on their children's examination results. If parents complained about teachers' ways of teaching, the principal (head of school) met with such parents and exchanged ideas on how this could be improved (IT5).

What was also evident on the basis of participant responses was that schools had a range of programmes such as those for remedial teaching (lessons for students), which were normally conducted outside of regular class hours. These programmes were implemented through agreement between teachers and parents, where each parent had to contribute to facilitate these programmes. However, of the 30 teachers interviewed, 21 complained that although these programmes were initiated in order to maximise students' chances of performing better in their examinations, many parents never contributed. Zaituni, an English teacher from Bondeni School, offered the following example: "At one time we agreed that students of the National Examination classes should stay in school and that their parents contribute some money for food expenses, but, very surprisingly, they never implemented that agreement" (IT14). According to these teachers, many of the parents who never

contributed were those whose attendance at meetings was poor. Nyuki, an experienced teacher from Nyikani School, and Mwamwezi, a Chemistry and Biology teacher from Bondeni School, expressed the concern that, owing to this tendency, some programmes geared towards improving student performance were terminated or suspended (IT10; FG4).

There was a perception among teachers interviewed that cooperation between teachers and parents had the potential for positive outcomes for teachers, because it provided a real picture of learners' behaviour both within and outside of school premises. However, they were worried that owing to a lack of parent awareness of the importance of their role in supporting their children's education, these parents never accorded teachers the necessary cooperation. Kileo, the head of Chuoni School, remarked: "Because of this unsatisfactory cooperation, some students tell parents that they are going to school, but they never come; you neither find them at home nor at school" (IT5). Zaituni offered this example: "There is a hole called 'ujaka', where some students hide instead of going to school, and what is worse is that none of the parents are aware of this and therefore do not take any action" (IT14). Kileo and Zaituni were surprised that, when a teacher took steps to rectify bad behaviour exhibited by students, parents of these students would "confront" the teacher in anger and defend their children at all costs. Therefore, these administrators made it clear to teachers that, even if a student misbehaves in the classroom or at school, they should "refrain" from calling the parent for "fear" that it might instigate an argument. This poor cooperation between teachers and parents suggests that teachers felt that the school community was unsupportive, thus discouraging them from working to the best of their ability.

"Nasty" cultural spaces teachers at Nyikani School saw themselves working in

In addition to minimal cooperation between teachers and parents, some respondents complained that because of a lack of understanding of the importance of education, parents of students had negative attitudes towards teachers and schools in general. This situation was more pronounced in Nyikani School than other schools involved. Mwema, a Geography teacher from Nyikani School, gave this example: "You may go to the market to buy tomatoes; for others, the tomatoes will be sold at 200 Tanzanian shillings, but since you are a teacher, they will sell you the same tomatoes at 500 Tanzanian shillings" (FG3). Igubike, a Geography and Civics

teacher from the same school (Nyikani School), said that these unsatisfactory social relations had created ill feeling between teachers and the community (FG3). It was observed that, because of these unsatisfactory social relationships, most teachers relocated from the villages where the schools were situated to live in neighbouring villages. Riziki, a Biology teacher from Nyikani School, noted during an interview: “You yourself saw, yesterday at the roadside, teachers were boarding cars to go to the next village where they have rented houses. We do so because we are afraid of being harmed or victimised at any time by the community” (FG3). By and large, findings under this theme suggest that such respondents perceived that poor parental cooperation was a liability to academic enhancement as it hindered teachers from carrying out their professional roles effectively. This state of affairs, moreover, prompted teachers to feel disenchanted with their occupation.

5.5. Capacity of registered students

The government expansion policy was accompanied by a deliberate attempt to enhance access and equity of students through reducing failure, dropout and repetition rates. The government also set out to increase the number of students transitioning from lower levels (forms one to four) to upper levels (forms five and six). In interviews, teachers acknowledged that to achieve this goal the government appeared to enrol a lower percentage of highly qualified students compared to a large percentage of low-ability students in the newly-built schools. Thus, the government achieved its goal of increasing student numbers from lower levels to upper levels of secondary education. However, the students who were registered were not of high ability in terms of examination scores.

A student could be admitted to one of these new community schools on the basis of an overall grade of 70 out of a possible 250 marks across all five subjects that pupils in primary schools sit for examinations. According to teachers, students who scored as low as 14 out of 50 per subject were being enrolled in these schools, even though secondary schooling in Tanzania is not compulsory. This government policy had created challenges for teachers, who felt that the quality of their teaching had been compromised. The sections below will report on respondents’ experiences in relation to the quality of enrolled students in terms of students’ intellectual abilities (i.e. low-ability students), and the social contexts these students came from.

5.5.1. Low-ability students

A number of respondents believed that the rapid increase in the number of community schools was not in response to an increase in the number of students who had achieved scores that would make them eligible for entry into the upper levels of secondary schools. Rather, the government enrolled students with low scores in order to increase numbers. A number of teachers interviewed emphasised that within this group of students with low scores, there were students who could not read or write. During interviews, respondents were prompted to explain how these students affected their teaching performance. In responding to this question, Mapambo, a Biology teacher from Mafanikio School, and Mwavita, an experienced teacher from Chuoni School, were able to compare the benefits and disadvantages which they encountered when interacting with learners who had high or low academic abilities. They argued that if the teacher interacts with highly intelligent learners, such a teacher's teaching capabilities should be equally high because of the possible challenges these learners are likely to pose during teaching and learning (IT8; IT4). Furaha and Mwavita were, however, concerned that if the teacher interacts with low-ability learners, the teacher's teaching capabilities tend to diminish over time because of the lack of a challenging learning atmosphere.

The teachers who chose to comment on this theme went on to suggest that the government's decision to enrol students with low intellectual capabilities had a detrimental impact on their realising their professional goals of teaching and learning. In focus-group interviews, seven teachers complained that the majority of these students found it difficult to grasp what they were taught – something that caused teachers to use extra “energy” and “efforts” in teaching. To clarify this view, Riziki, a Biology teacher from Bondeni School, offered this anecdote:

One day I was teaching “reproduction”, a Form Three Biology subject topic. But before starting the new topic I tried to ask them what they had learnt before and I realised that they totally did not understand what was taught. I used every strategy but they did not learn anything. Therefore, I reached the conclusion that they were not teachable. From that day, I became unmotivated to teach and I decided to evaluate myself, my style of teaching and the students. After the evaluation, I decided that although the lecture method in teaching was highly discouraged, I would use it. (FG3)

This is an example of how low-ability students generated resentment in teachers and undermined their self-efficacy.

Three out of 30 interviewed teachers also discussed the challenges they encountered when teaching students who lacked basic learning skills. They stressed that, because some students could not even read and copy sentences written on the board, some teachers started teaching them to read and write in conjunction with the topics at hand. In relation to this, Mkude, a Chemistry and Biology teacher from Chuoni School, gave this example: “I teach Chemistry, but I often find myself also teaching English in order to facilitate communication between me and my students” (FG2). Disma, the head of Nyikani School, and Ngoma, the head of Bondeni School, were concerned that since these students generally failed in National Examinations teachers lacked interest in them. As a result, they taught these learners reluctantly, while harbouring a grudge against them because they felt they exerted a lot of effort in their teaching but reaped very few positive outcomes. There was a sense that the trend of students joining secondary schooling without having basic knowledge and skills meant that the primary education system was failing them. Because of this perceived situation, these secondary school teachers felt they shouldered a greater teaching burden.

Consistent with Mkude’s strategy (above), Kileo, the head of Chuoni School, commented that, because low-ability students found it difficult to retain what they were taught, teachers sometimes had to divide the topics into very small subtopics to at least enable them to manage the learning at a pace that better reflected their needs. This practice meant, however, that sometimes teachers were unable to complete the syllabus within the prescribed time (IT5). This view of Kileo’s was echoed by Itowa, a Kiswahili teacher from Chuoni School, who stated:

Although the teacher may have one specific objective for the class, with mixed abilities such an objective may not be realised because the ability of such learners to learn is low. This situation happens because the low ability of learners to grasp knowledge forces teachers to repeat the contents, thus not being able to get through the syllabus. (FG2)

Of the 30 teachers interviewed, four commented that low-ability students did not like schooling; some of them played truant or pulled out of school because they were not learning anything. In this regard, Jackson, an experienced teacher from

Mafanikio School, and Huruma, a Chemistry and Biology teacher from Chuoni School, suggested that it would be more beneficial if the increase in schools was proportionally matched by the number of vocational training centres established, thus allowing those children whose interests were in learning vocational skills to enrol (IT3; FG2). An example given by Tembo, an experienced teacher from Chuoni School, was in a similar vein: “Among secondary school students, you find a few students that are academically capable, but others are not as bright and it appears as if they were forced to enrol in secondary education; their interest seems to be in vocational training” (IT6). Mwema, a Geography teacher from Nyikani School, was concerned that having such students mixed with able learners was not ideal, because they were able to influence in a negative way students who had an interest in pursuing secondary education (FG3). Jackson and Mwema claimed that since these students felt they were in the wrong place, they were unsettled in their learning, and this created a situation which “demoralised” teachers and prevented them from fully committing to developing quality teaching and learning experiences. Such findings suggest that the broader education system was actually failing these students.

A number of teachers from Nyikani and Bondeni Schools described how their schools’ records of academic achievement had suffered due to the government’s insistence that schools enrol more low-ability students. This also impacted on how the school was viewed and teachers felt about their roles, both of which were reinforced every year after National Examination results were published. After the release of these results, there was an evaluation done at the district level under the chairmanship of the District Education Officer. The teachers in this study noted that what was usually done in these evaluation meetings was the sharing of experiences, the identification of problems, and ways of solving them. It was at these meetings that schools, which were deemed to have achieved good results, shared with teachers from other schools the strategies they used to enable their students to achieve. In contrast, teachers whose schools performed poorly were asked to publically explain why their students failed. Mhidze, an experienced teacher from Bondeni School, who represented the school in some of these meetings, complained, “The act of being required to stand before others and explain reasons behind the poor performance of the school is really painful, because teachers are

treated as if they were the ones who sat the examination, while the problem is on the government who enrol students with poor grades” (IT13). Igubike, a Geography and Civics teacher from Nyikani School, who also participated in one of these evaluation meetings, shared this example:

When teachers of those schools which had performed poorly were asked to stand up and give the reasons for such poor performance, all eyes including those who were before dozing off were riveted to see who these teachers were. Ironically, I felt bad to be identified as one of those teachers. I evaluated and saw myself to be an under-professional teacher who was in the wrong place; I felt I did not belong there. All matters considered, it was very humiliating having to stand before other professional teachers and explain the reasons for my school’s poor performance. (FG3)

These teachers felt threatened and insulted for deficiencies (“failures”) for which they could not be deemed solely responsible. Mwema, a teacher from the same school (Nyikani School), was able to explain how poor student performance reduced the freedom of teachers to express their identities as teachers in relation to the wider society. She pointed out that because students with low ability always failed, it came to a point where you did not want to be identified as a teacher teaching in this school since, the moment you did so, you were sure to be reviled by being called “every imaginable name” (FG4). Mwema’s comment suggests that her sense of confidence and esteem was undermined as a result of poor school performance trends, which themselves resulted from the requirement to enrol low-ability students.

5.5.2. Student social contexts

It would seem that there was a limited understand among teachers about the role of the expansion policy and what a broader focus on education might mean for learning in their school communities. A number of teachers expressed concern that the secondary education expansion policy meant that many of the forms one to four students came from the same locality. Therefore, they were more or less similar in character disposition and academic orientation and were less likely to learn new knowledge from each other. This happened because the expansion policy was adopted in order to ensure that the majority of primary school-leavers in specific wards had access to secondary schooling. Mtendzi, an experienced teacher from

Chuoni School, believed that a similarity in characteristics and environment denied students the opportunity to learn and internalise new ideas from each other because their experience was too similar to offer anything challenging (IT2). This thought was endorsed by Nyuki, an experienced teacher from Nyikani School, who offered the following example: “A student who hails from a place which lacks education consciousness will be imbued with some elements of valuing education from a student/friend who hails from a background where education is valued” (IT3). In other words, Nyuki believed that students who came from the same environment lacked diverse models whom they could learn from and use as a basis for reflecting on their behaviours.

Nyuki’s comment was supported by Nditi, a History teacher from Bondeni School, who explained that when students from different backgrounds interact, their conversation might be characterised as follows: “My brother is studying at the university, my sister is an engineer, and I am studying in order to become a doctor” (FG4). He insisted that this kind of discussion would inspire learners coming from places where education is not highly prized to study hard and hence realise their potential. Both Nditi and Disma, the head of Nyikani School, insisted that coming from the same environment reduced academic competitiveness among students because they knew each other. Consequently, teachers found it difficult to convince certain students of the importance of education, and their need to study. The teachers who offered their views on this theme challenged this mode of enrolling students, because it had many negative implications for teaching and learning. They considered that the government decision to register students from the same localities not only affected student learning but also impeded the opportunity for teachers to learn from students of diverse backgrounds and experiences as a way of adding various challenges to their teaching. According to such respondents, this government trend resulted in teachers remaining professionally dormant or losing a certain degree of proficiency in their teaching.

5.6. Summary of major trends

The findings reported on in this chapter reveal that teachers expressed a range of negative sentiments in relation to how they felt about themselves as teachers in connection with the conditions brought about by the expansion policy in their

schools. I would argue that there is a correlation between these negative sentiments in relation to perceived changes in the nature of their work and the four sources of information outlined by Bandura (1997): mastery experiences, vicarious experiences, social persuasion, and physiological and emotional states (see Chapter 2). These four sources of information, I argue, have far-reaching effects on teacher efficacy. This final section, therefore, will draw together some evidence and instances of each of these sources and suggest how prevalent they were.

Physiological and emotional states

As highlighted above, findings suggest that the expansion plan induced more negative than positive feelings in teachers. Of course, the way teachers weighed and interpreted certain factors which prompted these negative physiological and emotional states differed. For example, it seems that housing shortages intensified negative physiological and emotional states (e.g., shame, stress, ridicule, fear, fatigue and tension) more so for experienced teachers than their less experienced counterparts. Moreover, female teachers, especially those from Nyikani School, expressed more negative feelings in relation to housing shortages compared to their male counterparts (Section 5.2.1). The respondents' opinions also show that those teachers who were prepared through intensive, short-course schemes reported more psychological concerns (e.g., feeling inferior) than the experienced teachers who had completed full teacher training programmes (Section 5.1.1).

Little or poor parental cooperation exacerbated negative emotional states for the more experienced teachers compared with their less experienced colleagues (Section 5.4.1). In addition, the skewing of teaching workloads produced more negative feelings in science and experienced teachers compared with other teacher categories (Section 5.1.1). The lack of supporting staff to assist teaching/learning and the running of the school exacerbated negative physiological and emotional states (e.g., feelings of fatigue and frustration) in teachers from Mafanikio, Nyikani and Bondeni schools. Science teachers also reported high levels of negative physiological and emotional states (e.g., feeling ill-equipped) as a result of the lack of laboratory resources for teaching (Section 5.3.2), and teaching low-ability students (e.g., feeling anger and burdened) (Section 5.5.1). Their humanities and social science counterparts experienced fewer negative physiological and emotional states. Furthermore, the poor examination results arising in part from government

directives to register low-ability students appeared to detrimentally affect the physiological and emotional states of teachers from Nyikani and Bondeni Schools more than their colleagues from Mafanikio and Chuoni Schools (Section 5.5.1). Overall, these particular cases show that negative physiological and emotional states were commonplace across almost all the themes emerging from the data and demographic categories of the research respondents.

Mastery experiences

This study also indicated that different teachers had different perceptions of the factors which influenced their mastery experiences. For example, Science teachers felt that their mastery experiences were compromised by teaching many classes or streams (Section 5.1.1), the poor quality of in-service professional development (Section 5.1.2), and the lack of laboratory resources (Section 5.3.2). In contrast, humanities and social science teachers believed that they were not successful enough in their work because they sometimes lacked opportunities to participate in various in-service professional development programmes (Section 5.1.2). Overall, both science teachers and humanities and social science teachers felt they were failing professionally because the low-ability students they were teaching were not achieving well (Section 5.5.1). Because of students' lack of success, teachers felt that they had inadequate abilities to influence learning and this reduced their "can do" attitude towards future teaching tasks. Compared to their less experienced colleagues, the more experienced teachers felt that the use of abridged textbooks negatively affected their competence in teaching (Section 5.3.1). My study findings also suggest that the social contexts from which students were drawn during the expansion policy enactment adversely impacted teachers' ability to learn and grow professionally (Section 5.5.2).

It would appear that teaching qualifications and the subjects taught influenced the way teachers processed (or not) information related to mastery experiences. Graduates from the intensive, short-course schemes portrayed themselves as not succeeding very well because they were only partially prepared. These teachers, for example, felt inadequate when they were given examples of professional documents during their pre-service education (i.e., schemes of work and lesson plans), because they were not actually taught how to write such documents themselves (Section 5.1.1). On the other hand, recently trained teachers, who had completed full, pre-

service teacher education programmes, appeared to see themselves as less effective because in some cases they had embarked on teaching as a career with low academic results in certain subjects. For this reason, these teachers did not feel confident to introduce new ideas to benefit their more experienced colleagues (Section 5.1.1).

In terms of teaching subjects, certain science teachers felt professionally ineffective because they were teaching more than one subject. Yet, humanities and social science teachers felt that teaching one subject instead of the two they specialised in during their teacher education led them to lose their sense of mastery in relation to the subject they were not teaching (Section 5.1.1). This was due to the high number of humanities and social science teachers employed. These few instances suggest that the mastery experiences of the teachers involved in this study were to some extent determined by certain shortcomings in the expansion policy in relation to staffing, resourcing for teaching, and the academic standard of registered students.

Verbal or social persuasions

Bandura postulated that verbal or social persuasion, which includes feedback on teaching, encouragement and moral support from others regarding teaching performance, may serve to shape the efficacy beliefs of teachers. In addition to this, my study found that social stigma and labelling, isolation or alienation, dislike, respect (or lack of), aspects of self-image, trust (or lack of), appreciation, care and reputation were part and parcel of verbal or social persuasion for the teachers studied. There was variation between teachers in terms of how they perceived the influence of the expansion plan on social persuasion as a category of self-efficacy information. The experienced teachers, for instance, demonstrated a greater concern about lacking helpful teaching feedback from school inspectors and heads of schools than their less experienced associates (Section 5.1.2). However, all teachers, regardless of their years of service and teaching qualifications, experienced negative social persuasion as a result of what they saw as inadequate government attempts at rewarding teaching excellence. Housing issues seemed to constitute more negative social persuasion (i.e., social ridicule) for experienced teachers than less experienced ones (Section 5.2.1). Poor quality office space was also viewed by the head of Bondeni School as a marker for the low regard in which he was held (negative social persuasion) compared to other heads of schools (Section 5.2.2). In addition, the reluctance of parents to work with schools appeared

to act in a negatively socially persuasive way (i.e., feeling unsupported) for almost all teachers interviewed (Section 5.4.1).

Vicarious experiences

Bandura (1977) emphasises that vicarious experiences take effect when teachers compare similarities and differences in performance between a model and themselves. However, there is some evidence in this investigation which suggests that the government's decision to employ less qualified teachers provided a threat to vicarious learning, particularly for highly qualified teachers, because they lacked co-models to imitate (Section 5.1.1). Conversely, however, this arrangement was of potential benefit to less qualified teachers because they were working with authentic or knowledgeable models. Whilst humanities and science teachers lacked vicarious experiences because they were not exposed to enough continuous in-service professional development, science teachers lacked such self-efficacy input because they interacted with poor seminar and workshop facilitators (weak models). As reported above, experienced teachers were more concerned about the lack of opportunities for vicarious learning from school inspectors than their less experienced counterparts were (Section 5.1.2). All teachers, notwithstanding their years of service and subject areas of specialisation, believed that their vicarious learning was compromised by the lack of workspace (Section 5.2.2).

This brief summary, then, suggests that the government's secondary school expansion policy and how it was implemented was a large contextual factor which impacted on all four of Bandura's (1997) sources of self-efficacy information. A range of negatively perceived conditions which existed in the schools during the implementation of the expansion plan produced a chain of powerful consequences in terms of these sources and thereby eroded the sense of self-efficacy for the teachers who participated in this research. The next chapter, therefore, will provide a detailed discussion about how these consequences were produced, how they radically changed the pattern of information that teacher self-efficacy judgements are based on, and how this information was processed differently by some teachers than others. Firstly, however, the findings in this chapter will be triangulated with findings from Chapter 4, in relation to the research questions.

CHAPTER 6: DISCUSSION

Chapters 4 and 5 reported findings based on an analysis of quantitative and qualitative data respectively. This chapter discusses the study findings in relation to the respondents' description of the various impacts of the expansion plan on teachers' work, professional identity and teachers' self-efficacy – the central foci of my research questions. Certain demographic categories of the quantitative findings will be integrated with the qualitative findings in order to produce a more robust understanding of the latter findings. In this process, however, I have not drawn on certain demographic information independently because of the limited number of respondents involved. For example, there were only two teachers with 30 to 39 years of service. Notwithstanding the value of their responses, I believed that the size of the group did not warrant an attempted generalisation. For the purpose of this discussion, I will therefore consider *more experienced* teachers as those teachers with years of service ranging from 10 to 39. Owing to the fact that Tanzania embarked on the expansion plan in 2004, I also anticipated that this category of teachers was likely to have been employed before or during the adoption of the plan. My approach in combining qualitative and quantitative findings for discussion will be accompanied by my own reflection on these while maintaining a focus on teacher efficacy. Throughout the discussion, I will be linking my findings with literature reviewed and the conceptual framework established in Chapter 2.

6.1. The government expansion policy and impacts on teacher efficacy

It has been emphasised previously that the secondary education expansion policy of the Tanzanian government attempted to increase access to secondary education, improve equity and enhance the quality of education delivery. The implementation of this policy resulted in an increase in school numbers and enrolment rates. Numerous strategies and targets were set in order to ensure the successful enactment of the policy. The findings of this study, however, suggest that the expansion policy was in certain aspects not successful and that this impacted negatively on the quality of teaching and consequently outcomes for students. They also suggest overall that the manner in which the expansion policy was implemented contributed to the erosion of the position of teachers in society in

terms of their sense of being valued professionals. This produced further vicious cycles of effects and consequences and thereby reduced the possibility of enhancing the standard of secondary school teaching and student experiences. This was evident across almost all themes.

Findings related to an analysis of quantitative data presented in Chapter 4 largely indicate that the expansion policy was implemented poorly; this had an adverse impact on teacher efficacy and, ironically, undermined the policy itself. This chapter, therefore, will discuss the way in which inadequate aspects of the government's enactment affected the professionalism of teachers, particularly their self-efficacy beliefs. Initially, I will demonstrate how the sources of self-efficacy beliefs worked in pairs or clusters. This will be followed by a discussion focusing mainly on five areas: changed teaching conditions; the impact of professional development (or lack of it); community engagement; school culture; and finally, the influence of motivation and empowerment.

6.1.1. The interrelatedness of sources of self-efficacy information

Bandura (1986) and Tschannen-Moran et al. (1998) point out that how sources of efficacy relate to each other depends on the cognitive processing of information by individual teachers. This cognitive processing is influenced by cultural and contextual factors, and, as highlighted in Chapter 2, these determine how teachers select, weigh, interpret and integrate sources of information. This study of the impact of the Government's secondary education expansion in Tanzania has indicated that the sources of efficacy beliefs did not work in isolation but reinforced each other. The combination of these sources had a considerable impact on teachers' beliefs in relation to self-efficacy. This research, however, also reminds us that although these sources often existed in combination, at times one source more than another can impact on the self-efficacy of an individual teacher.

In the existing study, an example of integrative impact can be found in the combination of the sources social/verbal persuasion, and physiological and emotional arousal. For example, when teachers felt less competent because of the lack of respect shown to them by parents, alongside being tired or overloaded, this exacerbated their feelings of low morale. Further evidence of this combined impact of multiple self-efficacy sources can be seen in the shortage of teaching and learning

resources which had a detrimental effect on teachers' professional skills, making them feel less capable and therefore demoralised (physiological and emotional states) (Section 5.3). Such instances indicate how emotional and physiological states interact with either social persuasion or enactive mastery experiences to influence teachers' sense of efficacy.

In line with Hampton (1998), this research demonstrates the interrelationship between vicarious experiences and enactive mastery experiences with regard to teachers' self-efficacy. As the respondents' testimonies show, a lack of contact with vicarious experience in the form of contact with experienced colleagues (for example, school inspectors and principals/other teachers) limited opportunities for teachers to develop or engage in enactive mastery experiences that might improve their teaching knowledge (Section 5.1.2). My findings and Hampton's conclusion are also consistent with Bandura's (1977) notion that witnessing the successes and failures of peers (other colleagues) contributes to beliefs in relation to one's own cognitive growth abilities. Bandura's argument seems to suggest that vicarious experiences and mastery experiences can work together in constructing individuals' sense of self-efficacy. The present study's findings, however, are out of step with those of Joet, Bressoux, and Usher (2011), and Loo and Choy (2013), who found that only physiological and emotional states, verbal persuasion, and enactive mastery experiences work together to predict self-efficacy beliefs. The latter seem to suggest that vicarious experience do not interact with other sources to construct individuals' self-efficacy beliefs. As a possible explanation of such examples of a lack of congruence between findings, some researchers have argued that the inconsistency and mismatch of Bandura's hypothesised sources might be attributed to differences in methodological measures (Hackett, Betz, O'Halloran, & Romac, 1990; Tschannen-Moran & McMaster, 2009; Usher, 2009).

My findings, together with previous qualitative studies by Zeldin and Pajares (2000), and Zeldin, Britner, and Pajares (2008) confirm that vicarious experiences, social persuasions and mastery experiences interact with each other to shape one's self-efficacy beliefs. In these studies, female respondents mentioned vicarious experiences and social persuasions as the most potent sources of efficacy, whereas male respondents saw mastery experiences as the most influential. This difference in the weighing of the sources of efficacy further illustrates the argument made by

numerous self-efficacy researchers, that people may rely differently on sources of efficacy beliefs as a function of either gender, learning domain or cultural/ethnic background (Hampton & Mason, 2003; Iaochite, 2014; Usher & Pajares, 2009; Uzuntiryaki, 2008; Webb-Williams, 2014).

These few examples suggest that, in most cases, mastery experiences are influenced by the other three sources of efficacy in the construction of self-efficacy beliefs. This is in line with my early argument that Bandura's contention that mastery experience is a powerful source of efficacy information perhaps stems from the fact that this source is built and regularly modified by the other three sources (see Chapter 2). Bandura termed this relation *configurative* in the sense that "the strength of one source depends on the presence of others, each of which depends largely on personal and contextual factors" (Usher & Pajares, 2008, p. 755). Although Bandura and some other self-efficacy researchers postulate that mastery experiences are the most influential source of efficacy information, this was not the case for my research. If I were to rank the sources of efficacy evident in my study, the greatest part would be given to physiological and emotional states followed by mastery experiences. The few examples cited above show that physiological and emotional states, and mastery experiences significantly interacted with other sources of efficacy in various ways to erode teachers' competence beliefs. Vicarious experiences and social persuasion were also important, but they were not as regularly reported as physiological and emotional states, and mastery experiences.

6.1.2. Changed teaching conditions

In the course of this study, I identified two major categories in relation to teaching workload which had considerable impact on how teachers viewed themselves as professionals in their work, and in particular on their self-efficacy beliefs. These categories were teaching large class sizes and performing additional duties.

Large class sizes and teachers' ability to influence meaningful student learning

The tremendous increase in enrolment rates as a result of the expansion policy was the first and foremost factor which affected classroom teaching and consequently teacher efficacy. According to the Tanzania Ministry of Education, a standard class should contain no more than 40 students in a single stream (Ministry of Education

and Vocational Training, 2007b) (see also Chapter 2). In spite of this, the teachers, especially those from Mafanikio and Chuoni Schools, were concerned that one classroom might be occupied by more than 70 students. The teachers interviewed from these schools pointed out that having large numbers of students in the same space meant having a greater variety of behavioural characteristics to address. This interfered with teaching, as teachers focused more on classroom management and control than student learning. This meant that teachers often failed to accomplish specific objectives they had set in their lesson plans. As a consequence, teachers were blamed (verbal persuasion) for lagging behind in implementing the syllabus. This discouraged teachers, hence lowering their sense of professional morale.

The degree of discomfort or distress teachers experienced in teaching large classes was also evident in teachers' perceptions about their levels of confidence in doing so (item 1 of factor 2) (see Section 4.1.1). In this item, the majority of teachers indicated that large class size was a factor negatively affecting their self-efficacy. One might infer that, previously, these teachers had been teaching more manageable class sizes, and thus had demonstrated their capabilities in managing student behaviour. However, with the increase in enrolment rates, their self-perceived ability to manage student behaviour was undermined. This supports the view that small classes are favoured by teachers because there are fewer disciplinary issues to manage. Studies by Brouwer and Tomic (1999), and Nye and Hedges (2004), showed that large class-size influences the efficacy beliefs of teachers. They also found that overcrowded classes generate feelings of anxiety and frustration in teachers because it is difficult for them to maintain order. These researchers claimed that this situation reduces teachers' interaction and relationship with their students and may become one of the factors leading to pre-mature retirement among teachers. In my study, however, the resultant negative physiological and emotional states as a result of teaching congested classes contributed to ineffective and inefficient teaching on the part of teachers, and thereby compromised the academic performance of the students.

For example, the majority of science teachers demonstrated a low degree of confidence in their capability to influence learning because of student discipline problems when compared to their humanities and social sciences counterparts (see Figure 4.3). Noise created by students in large classes, especially when competing for limited access to equipment during experiments, was a factor which interfered

with teaching, as teachers had to stop teaching and address the behavioural problems that arose. Although my study found that science teachers struggled more than social science and humanities teachers to manage student behaviour in large classes, Klassen and Chiu (2010) in a similar study found no difference between teachers of different subjects in terms of class management. Instead, these researchers found that the ability to manage student behaviour depended on the gender of teachers. Female teachers indicated a lower sense of self-efficacy than their male counterparts in relation to this theme. As I argued in the literature review (see Chapter 2), these findings might be related to the fact that there are some cultures where male students are not encouraged to respect female teachers. Such cultures are likely to exacerbate feelings of inferiority (negative physiological and emotional states) in female teachers and thereby lower their beliefs in their teaching competence. In Tanzania, however, this situation was compounded by the unavailability of crucial resources (for example, laboratory equipment).

In conjunction with difficulties in controlling students' misbehaviour, the teachers interviewed from Mafanikio School claimed that overcrowded classes reduced their perceived ability to properly identify learners' varied needs. The teachers also shared with me the strategies they and other teachers used to deal with large classes. For example, Kiongozi, a Physics teacher from Mafanikio School, indicated that, because of the large number of students in a single classroom, teachers tended to avoid giving multiple exercises to their students for "fear" of the marking "burden" (FG1). Related to this idea, Mgosi, a humanities and social science teacher from Chuoni School, declared that due to the high number of students in the classroom, teachers never required students to work in groups because the limited space affected their ability to interact effectively (FG2). These respondents' opinions suggest that teachers' self-perceptions of their readiness to deliver effective learning opportunities were diminished when they had large classes. There is also the suggestions that during the establishment of new schools teachers were not exposed to the pedagogical knowledge and skills on how to manage and deal with large classes which might enhance their sense of self-efficacy. This was evident when teachers expressed the need for more training as a way of increasing their sense of confidence in dealing with students (item 2 of factor 2) (see Section 4.1.1).

Additional duties

The second category of teaching workload was related to performing multiple roles. In this regard, some teachers reported that they were expected to teach additional curriculum areas and/or undertake other roles which were not in their job description, such as managing school accounts or being expected to take on the role of laboratory technician (Section 5.1.2). Teachers' responses in relation to teaching morale clearly revealed how they felt when performing these multiple roles (item 2 of factor 4) (Section 4.1.1). In particular, teachers with ten to 19 and 20 to 29 years of service and teachers with diploma and master degree qualifications indicated that they felt more exhausted by having to teach while being expected to assume additional duties. It may be the case that teachers who rated their feelings positively in this item were those who had not been expected to perform other school tasks in addition to teaching. Research evidence suggests that, together with a decreased sense of their professionalism, performing multiple roles exposes teachers to possible dangers of psychological vulnerability, such as depression and work stress (Adelmann, 1994; Barnett & Hyde, 2001; Hong & Seltzer, 1995). In line with these studies, the group of Tanzanian teachers in this study found maintaining multiple roles and duties detrimental to their physiological and emotional states and, as a result, had a decreased sense of self-efficacy.

6.1.3. The impact of professional development (or lack of it)

This study provided evidence that although most teachers saw themselves as having knowledge and skills, they still believed that professional support, whether from the government or authority figures, played a significant part in their career development. As reported earlier, teachers' perceived level of support from school inspectors and heads of schools, especially during the implementation of the expansion plan, was relatively low. As is evident in Section 4.1.1, the more experienced teachers were discontented with the frequency of school inspections and classroom observations by school inspectors and heads of schools, when compared with their less experienced colleagues. This suggests that the more experienced teachers compared the regularity of inspectors' visits to their schools before and after the adoption of the expansion policy. It may be that the longer-serving teachers had previously enjoyed regular school inspection visits and classroom observations. However, these inspections declined after the

establishment of the expansion policy which introduced increases in the number of schools and enrolment rates while the number of school inspectors remained fixed. Limited school inspection visits and classroom teaching observations in the course of the enactment of the policy appeared to encourage teachers to feel that they had reduced opportunities to develop their self-perceptions of their teaching abilities. On the other hand, the positive feelings about school inspection and classroom observation demonstrated by the less experienced teachers may suggest that these teachers were anxious about inspection and were quite happy not to be inspected regularly.

Funding

Inadequate funding to match the intent of the expansion plan impacted on school principals' (heads of schools) capability to support teaching and learning. Findings show that, despite the government's promise that it would increase the capitation grant for improving the quality of education delivery, schools did not get the full amount owing them; indeed, sometimes this meagre amount was delayed. Bredeson (2000), Lunenburg (2010) and Emily (2015) assert that school principals are responsible for establishing an environment which enables their teachers to grow professionally. However, the principals in my study highlighted how challenging it was to do this without adequate funding. Limited or late funding from the government reduced the ability of new school principals to perform their professional roles as school leaders, especially in supporting their teachers with resources to enhance their perceived and actual professional teaching knowledge and skills (see also Chapter 2).

The widespread dissatisfaction regarding the ability of schools to promote career and collegial development of teachers was also reflected in the quantitative findings (item 2 of factor 5) (Section 4.1.1). In this item, however, teachers' feelings varied in accordance with their length of teaching service and subject areas of specialisation. The more experienced teachers (that is, teachers with 20 to 29, and 30 to 39 years of service) did not believe that their schools created an environment that was supportive and helpful in enabling successful teaching and learning. As with the issue of school inspections, this may be because these teachers were reflecting on how schools were resourced before the adoption of the expansion plan. It may be that the tremendous increase in new schools and enrolment rates resulted in teachers becoming anxious about their schools' ability to establish an environment which allowed for the

developing of a professional learning community. This situation would have reduced teachers' confidence in dealing with the classroom teaching challenges they encountered. I believe this to be the case because, from my experience, learning is an interactive process between teachers and students. For this reason, environments which do not allow teachers to develop, acquire and construct new knowledge and skills may contribute to a failure to foster high teaching and learning standards (see Chapter 2). Nevertheless, that there were new teachers who indicated that their schools created an environment that was supportive and helpful in enabling successful teaching and learning suggests that these teachers had access to at least some resources, and believed that they were reasonably competent at the jobs and therefore did not see a need for help.

In relation to subject areas of specialisation, science teachers responded positively that their school created an environment that was supportive and helpful in enabling more successful teaching and learning, while humanities and social science teachers responded in a contrasting fashion. As reported by the heads of schools, these contrasting responses might be attributed to the fact that, during the policy enactment, most of the government's modest capitation grants were directed towards purchasing science resources, particularly text books. Even though the heads of schools were unable to explain why the government focused its attention on science subjects, one might connect this prioritisation to the fact that more students were failing in these subjects than in the humanities and social sciences (Ministry of Education and Vocational Training, 2011, 2012; Twaweza, 2013). It would appear from my study that the government decision to direct the limited financial resources to science resources resulted in humanities and social science teachers feeling overlooked and that their subjects were of less importance (negative social persuasion). A comparable relationship between supportive school leadership and teacher efficacy was confirmed in a study by Weisel and Dror (2006). In this study, teacher self-efficacy was reported to be higher in schools where teachers perceived that their school principals supported them with adequate teaching and learning resources than in schools where their principals did not. One possible explanation for this may be that the principals in these former schools were better funded. For this reason, such principals were able to better support their

teachers in terms of providing teaching and learning materials across all teaching subjects, thereby enhancing staff self-competence beliefs.

Even though the teachers knew that among the reasons for student failure was the lack or poor quality of professional development, they shared with me feelings of guilt when students failed their examinations (Section 5.1.2). These teachers could hardly held responsible when they were not given opportunities for effective regular professional development as promised by the government in the expansion policy. Bandura (1995) asserts that adequate professional development induces positive feelings in teachers. He, however, argues that such feelings cannot guarantee effective teaching if teachers lack knowledge, skills and attitudes which enable them to be effective. Still, Bandura stresses the importance of high-quality professional development for teachers as a way of enhancing their classroom teaching effectiveness. A study by Türkoğlu, Cansoy, and Parlar (2017) on the relationship between teachers' job satisfaction and self-efficacy found that teachers who lack opportunities for professional development feel less satisfied with their teaching competence. In my research, however, economic limitations in providing staff with regular professional development assistance denied teachers' opportunities in relation to vicarious experience and verbal persuasion so as to develop and build their confidence as teaching professionals. Because of this, teachers continued to teach in accordance with what they knew or skipped topics they thought they could not manage (see Section 5.1.2).

Meeting the needs of low-ability students without support

The expansion plan did little to support teachers' ability and confidence to work with students who struggled academically. During the expansion plan enactment, some teachers were neither informed of the expected diverse cognitive abilities of learners in their classrooms nor assisted with pedagogical strategies and approaches necessary to enhance confidence to help a more diverse and challenging range of students. This study's findings suggest that the lack of teacher preparation in relation to teaching diverse and challenging students meant that teachers were unable to effectively work with low-ability students in ways that either support students, or extend and advance the teachers' own perceived levels of expertise. This is evident when teachers interviewed reported that the low-ability students they taught had an adverse effect on teachers' emotional states, and their confidence to

teach mixed-ability classes. The lack of confidence these teachers exhibited around their ability to work with less-able students was mirrored in the questionnaire responses (item 1 of factor 6) (see Section 4.2.1). In this item, most teachers expressed a low degree of self-efficacy in helping the most difficult students.

Additional responses to changes in circumstances brought about the expansion were also evidenced in teachers' complaints about how it had resulted more less-able students attending local secondary schools. So, in contrast to celebrating the transformative potential for communities that the expansion plan offered, the lack of professional development and lower levels of self-efficacy resulted in teachers exhibiting negative attitudes towards both students and the communities they came from. This seemed to lead to a cycle of negativity between the teachers, students, and school community. Professional development that supported teachers to recognise the importance of students' diverse backgrounds and prior knowledge (IJzendoorn, Juffer, & Poelhuis, 2005; Thompson, 2013; Tucker-Drob & Harden, 2011) would have better positioned teachers to identify the competences of low-ability students in the same way they did in relation to their high achievers (Brunning et al., 2011). This in turn would have enhanced teachers' ability to identify and address students' learning gaps (Johnson & Worden, 2014; Kyriakides, Creemers, & Antoniou, 2009; Ojose, 2008; Taber, 2011; Webb, 2010), and therefore improve their own teaching practices and confidence in teaching academically challenged students.

Learning from others' experiences

Findings from this study suggest that beginning teachers had limited opportunities for vicarious experiences. Inman and Marlow (2004) and Hsieh (2015) found that new teachers develop as teachers if there is a well-established setting or set of mechanisms which enables them to learn from more experienced colleagues. According to Robson (2006), such a setting is crucial because, when new teachers begin their teaching careers, they encounter various complexities as they interact with the school environment. The current study, however, found that the collaboration between novice teachers and experienced teachers was very limited, especially during the initial stage of the expansion plan enactment. My findings suggest that because of the desperate need to meet the demands of a growing number of students, many teachers who were posted to work in the new schools,

especially Nyikani and Bondeni Schools, were inexperienced. Sadly, on beginning their work in these schools, they did not find experienced teachers who were capable of mentoring them in the profession and willing to do so. This situation denied these beginning teachers opportunities to learn new approaches which might have improved their competence, unlike counterparts who were lucky to be posted to more established secondary schools, many of which were staffed by very experienced teachers who were able to mentor novice teachers.

The effect of interactions between experienced teachers and novice teachers on self-efficacy growth has been highlighted by Chester and Beaudin (1996), who investigated whether newly hired teachers' collaboration with experienced colleagues shaped the professional careers of these novices. Chester and Beaudin found that such collaboration was crucial in increasing the perceived competence of newly employed teachers. They thus asserted that "the greater the opportunity for collaboration with other adults and the more observations that were made, the greater was the teachers' sense of efficacy" (p. 241). This perspective, placed alongside my own findings, are also consistent with studies indicating that beginning teachers who lack mentoring from experienced teachers are likely to feel inferior; consequently, they become less effective in fulfilling their academic and professional aspirations (Alhija & Fresko, 2010; Cameron, Baker, & Lovett, 2006; Demir, 2008; Klassen et al., 2009). For example, in their study of the relationship between mentoring and career satisfaction of Israeli beginning teachers, Alhija and Fresko (2010) found that novice teachers who were not mentored by veteran colleagues felt professionally dissatisfied and experienced a sense of shock on embarking on careers as teachers. It may be that during their pre-service teacher education these novice teachers had expected that upon arrival at their workplaces they would meet with experienced co-workers who would mentor them to become more effective teachers. I would surmise that beginning teachers in new schools in Tanzania who lacked mentoring, experienced a similar kind of professional reality shock.

My research findings (like those of Alhija and Fresko (2010)) are in contrast to those from a study by Neil and Susie (2002), which found that novice teachers perceived mentoring support from more experienced colleagues as having little impact on improving their self-competence. Maybe these novice teachers

maintained a belief that their teaching proficiency would increase as they regularly interacted with one another in professional settings. In my opinion, however, this scenario would not apply to novice teachers in Tanzanian community secondary schools because these teachers carried out their duties in very complex and challenging settings.

6.1.4. Community engagement

Information contained in policy documents shows that the government adopted the expansion plan with the expectation that parents would complement the government's initiative (Ministry of Education and Culture, 2004) (see also Section 5.4.1). It was stated in the expansion plan that the government aimed to strengthen parental participation. However, it seems that although the government suggested this, the concept had not been communicated well to schools and parents. The lack of a line of communication between schools and parents added certain complications for teachers, particularly when the government delayed financial support for schools, and teachers had to seek further financial contributions from parents for the effective management of schools. My research indicates that the majority of parents were reluctant to contribute. From my perspective, this trend disappointed teachers and created stress for them in having to come up with other ways to help students perform better in their National Examinations. A study by Majerus (2011) revealed that parents' lack of enthusiasm to contribute detrimentally affects teacher behaviour. The researcher argued that because of parents' negative responses, teachers were inclined to place more emphasis on helping children whose parents actively supported the school's development endeavours. As previously noted (see Section 5.4.1), however, some programmes initiated by teachers for the purpose of enhancing outcomes of students in newly built schools were terminated or suspended because of parents' failure to contribute.

Teachers' disillusionment in relation to their efforts to convince parents to support their school was also manifested in teachers' responses about enlisting parental involvement (item 3 of factor 4) (Section 4.2.1). In this item, most teachers had relatively low degrees of self-efficacy around influencing parents to become involved in school activities. Findings suggest that because of this negative parental response, teachers became upset and as a result felt less valued. Consequently, teachers became less confident in realising their professional roles. The self-belief

of some teachers about their inability to create a productive learning environment, especially in terms of making students believe they can do well in their schoolwork, confirms this reflection (item 3 of factor 1) (Section 4.2.1). It is certainly arguable that the reluctance of parents to support schools reduced these teachers' sense of confidence in accomplishing such a task.

The respondents believed that academic and behavioural issues with students could be easily addressed if both teachers and parents worked together, and should not be addressed by teachers alone. However, this study found that when students misbehaved their parents were unlikely to support teachers to develop a solution (see Section 5.4.1). There was a parental expectation that teachers themselves should address these behavioural concerns. As I reflect on my findings, I find myself concluding that the teachers were confused about their role: were they parents, social workers or teachers? Further, the lack of parental support led teachers to feel constrained in terms of curbing truancy, reducing the numbers of students dropping out, and dealing with other disruptive behaviours (McClowry et al., 2013; McCormick, Cappella, O'Connor, & McClowry, 2014; Yuan & Che, 2012).

Santrock (2011) asserts that teachers who lack the ability to manage students' behaviour because of inadequate support from parents, become emotionally adversely affected and likely to regret having become teachers. In my focus group interviews, teachers from Bondeni School claimed that the bad relationship existing between teachers and parents made teachers fearful (negative emotional states) in their work and at times prompted thoughts of shifting to other schools where the community might be understanding and cooperative. Notwithstanding this lack of school-home cooperation, in their questionnaire responses the majority of teachers viewed themselves as capable of influencing parents to help their children do well in school, and also making them feel comfortable about coming to the school (Section 4.2.1). Teachers seemed to believe they would be able to undertake these professional duties if they had more and better opportunities to meet with parents. However, as reported earlier by the respondents, most parents did not turn up to school meetings when they were invited to participate and contribute (see Section 5.4.1).

The variation in parents' economic status in Tanzania suggests that new schools located in very poor socio-economic settings required more assistance from the

government in order to support the improvement of the quality of education delivery. It can be argued that socio-economic differences between parents were not seriously taken into account during the implementation of the expansion plan. While some schools were established in well-off areas, others were in socially and economically disadvantaged settings (see Section 3.3.1). These contrasts in environments were a factor impacting on parents, especially when it came to supporting schools financially. It is easier for parents in productive areas to find employment, thus generating enough income to be able to contribute to the school, than parents in unproductive areas. Consistent with my own findings, Bandura (1995) pointed out that financial stress creates feelings of despondency in parents, and hence limits their ability to effectively engage in school development activities. Building on Bandura's work, Khan (1996) asserted that "many low-income parents consider schools as institutionalised authority, hence leaving the responsibility solely to the teachers to educate their children" (p. 62). Bandura and Khan, therefore, support my previous argument that there is a direct relationship between the economic well-being of parents and their engagement in and commitment to the provision of quality education. The implication here is that, even were parents from unproductive areas given sufficient knowledge about the expansion project, their ability to contribute money towards the progress of the school would be compromised by their relative poverty. Consequently, teachers in schools in such areas had difficulty in getting extra funds for both professional development and resourcing, especially to buy books and other school materials which might help enhance their belief that they could do a good job.

Involvement of other community members

In the expansion policy document, the government highlighted that it would involve community organisations in the process of constructing new schools across the country (see also Section 5.4). I anticipated that since the government had limited funding to improve the quality of education delivery in new schools, teachers would be required to convince these communities and volunteer organisations to support government efforts in this particular area. However, as my findings indicate, teachers did not succeed in this task. Somerville and Rennie (2012) and Cain, Wieser, and Livingston (2016) suggest that in order to become successful in mobilising community organisations to work with schools, teachers and principals

need specific training. The present study found that, when the expansion plan was adopted teachers were not oriented–or trained to encourage different educational stakeholders to support the new school development endeavours. This was revealed in their inability to enlist community support and involvement (factor 2) (Section 4.2.1). In this factor, the majority of teachers indicated a relatively low degree of self-efficacy in motivating community groups, businesses, and colleges and universities to become involved in working with their school. Therefore, my findings suggest that a lack of professional knowledge regarding enlisting community participation diminished the possibility of teachers capitalising on the community organisations around them as resources to enrich their sense of teaching success and competence (Bogler & Somech, 2004; Khanal, 2013; Prew, 2009; Sanders, 2003; Shaeffer, 1994).

6.1.5. School culture

Inadequate enactment of the school expansion policy resulted in a teaching culture which had detrimental consequences for the growth of teachers' sense of efficacy and professional identity. For example, the failure of the government to achieve a balance between humanities/social sciences and science teachers, appeared to discourage the formation of collaborative cultures amongst teachers (Section 5.1.1). This suggests that in the implementation of the expansion plan, little was done in accordance with Bandura's (1997) assertion that students perform better academically if the school has a culture which allows teachers to cooperate with one another. For instance, the shortage of science teachers resulted in these teachers lacking colleagues with whom they could discuss issues related to their subject areas. This state of affairs was academically challenging to science teachers, because it hindered the sharing of experiences, and therefore their capacity to improve their professional knowledge, skills and attitudes. A work contexts which does not provide such opportunities for teachers to interact is a threat to the quality of educational delivery and appears to be detrimental to teacher efficacy. Whilst Shellman and Bernal (2004) argue that an individual-oriented culture is more likely to boost self-efficacy beliefs than a collaborative culture, their study was based in the United States of America where individualism is the norm. In my view this idea is not applicable to the Tanzanian context where collectivism is practised and collaborative learning is highly encouraged in the education system.

Findings suggest that lack of office space in the context of the enactment plan was also a challenge for teachers to establish a collaborative culture necessary to develop their collective efficacy (Section 5.2.2). These findings are in line with Katz-Navon and Erez (2005) and Krammer, Gastager, Lisa, Gasteiger-Klicpera, and Rossmann (2018), who state that teachers construct collective self-efficacy through engaging in analysis of teaching tasks. According to these researchers, this mainly happens when a physical infrastructure is available, appropriate and supportive to teachers. Bandura (1995) and Goddard, Hoy, and Hoy (2000) further assert that teachers construct collective efficacy through peer observations. In his seminal work, Bandura (1994) emphasises that there should be established cultural norms which encourage teachers to use classrooms to develop their collective efficacy. This, according to Bandura, vicarious learning experiences for teachers, especially in the context of classroom teaching, play a significant role in developing their collective efficacy. This is a different manner than access to suitable office spaces as perceived by teachers I interviewed. However, the latter can be viewed as a condition conducive to the former. I would also argue that teachers in community schools in Tanzania could themselves exercise more initiative by establishing social networks outside school such as inter-school collaboration (see also Chapter 2) in order to share their teaching expertise, and thereby enhance their collective teacher efficacy as educational professionals.

Promotion and salary advancement

A number of teachers in this study felt disenchanted or overlooked in relation to career and collegial support, especially in terms of promotion (see Figures 4.4 and 4.5) (Section 4.1.1). The delay in implementing promotion and salary advancement during the policy enactment induced in the case of some teachers habits of truancy and absenteeism, thus restricting students' access to academic assistance (Section 5.1.2). Teachers used issues of promotion and lack of salary increase as pretexts for leaving school early to engage in other activities aimed at generating income to make ends meet. While some teachers in urban schools were reported as working in small businesses, their fellow teachers in rural schools engaged in agriculture. Certainly, teachers' engagement in these non-academic pursuits were likely to be a liability to their intellectual and professional growth. It would also have raised questions within their own communities: were they teachers, business people or

agriculturalists? This kind of role conflict had the potential to lead to social ridicule of the teaching profession and demoralisation, and consequently to discourage other teachers from making an effort in their teaching.

I surmise that, besides discouraging teachers, members of local communities drew the conclusion that teaching was an inferior profession when they saw teachers engaged in small businesses and agricultural activities. There was the further risk that students, especially the academically able ones, might lose interest in the thought of teaching as a career, and thus not consider joining the profession. The perception that anyone can teach might be one of the reasons teaching was in danger of becoming a career for poorly performing school graduates who lacked alternative employment. Teachers engaged in out-of-school employment were more likely to teach poorly and project a misleading image of the profession – a situation that has the potential to produce a vicious cycle of poor role models attracting poor applicants to the profession. Bandura (1986) and Tomšik (2016), for example, pointed out that to a large extent role models provide opportunities for students to learn about the labour force and working conditions in organisations, and to evaluate whether or not they wish to join that occupation. They argued that when students see others succeed in their professional lives, these students become interested with that particular career. However, observing career failure will create doubt in students about that profession. Bandura (1986) insisted that people who harbour such doubts never opt for such the career in question.

Shortage of books and school inspectors

Another major finding, which exemplifies how inadequate policy enactment impacted on the cultural aspects of teaching crucial for self-efficacy construction, relates to the shortage of books. As reported earlier (Section 6.3.1), the shortage of books meant teachers had to rely on a limited number of texts which were written only in summary form. Apart from being inadequate as teaching resources, these books prevented teachers from developing a professional reading culture. Consequently, teachers lost their sense of interest, ability, confidence and inclination to influence positive student learning outcomes. The expansion plan stipulated that all rural new schools without hydro-electric power would be supplied with solar power and the internet in order to enhance the process of teaching and learning, but this had not happened. Therefore, as well as an inadequate supply of

books, teachers lacked alternative or supplementary sources, such as access to the internet, for broadening their learning experiences and therefore increasing their levels of knowledge to support their students.

This research also suggests that some teachers were not sufficiently aware of their professional roles as teachers. As already reported (see Section 5.1.2), infrequent school inspectors' visits to new schools inclined teachers to neglect some aspects of their professional tasks, in particular regular lesson preparation. Houston and Beech (2002), and Cicek (2013) note that lesson preparation provides teachers with opportunities to evaluate their own competencies, assess the relevance and adequacy of teaching materials, and reflect on their pedagogical approaches before the actual delivery of the subject matter. We can surmise that since a number of the study teachers did not effectively engage in lesson preparation, they were likely to lose confidence in their classroom teaching, and find themselves labelled by their students as incompetent.

It would appear that there was a misunderstanding among teachers about the exact role of school inspectors, since some study teachers only engaged in lesson preparations to please inspectors (see Section 5.1.2). This is an indication that such teachers were extrinsically motivated and yet to realise that school inspectors are not there to force them to perform their work; their main role is to evaluate how teachers prepare lessons, set assignments and influence student learning (Bredeson, 2000; Ehren & Visscher, 2008; Harris, 1989; Lindgren, Hult, Segerholm, & Rönnerberg, 2012; Richards, 2001). After observing these professional activities, these school inspectors are obliged to share their expertise and experiences in order to develop teachers' beliefs in their own ability to teach. I am of the view that such a school culture has to change, because teachers as professionals should ideally adhere to sound teaching principles, even if no one scheduled to observe them.

6.1.6. Motivation and empowerment

It became evident in this study that teacher motivation is closely linked to self-efficacy beliefs. Bandura, in his social cognitive theory, maintains that developing motivational abilities in teachers is crucial to their accomplishment of teaching tasks (Bandura, 1997; Har, 2008; Watters & Ginns, 2000). In a review of the literature on the influence of motivation on work effectiveness, Lai (2011) found

that teachers' motivational ability varied in accordance with their subject areas of specialisation. Apart from subject area, my research also noted that motivational ability correlated with the gender differences (item 1 of factor 3) (see Section 4.2.1). Male teachers viewed themselves as having less ability to help students work together, compared with their female counterparts (see Figure 4.7). The feeling of readiness demonstrated by female teachers towards achieving this particular role – notwithstanding school resource constraints – might be attributed to the fact that in many societies females feel more sympathetic than males to helping vulnerable students (see Chapter 2).

Another area influencing the motivation of teachers was a lack of teaching and learning resources. In interviews, 16 out of 30 teachers claimed that the shortage of books posed a big challenge in terms of giving students group reading assignments. Kihombo, an experienced teacher from Mafanikio School commented: "I might have 10 or 20 copies of books for 200 students. How will they learn?" (IT2). On reflection I would suggest that the shortage of books was among the factors which reduced teachers' self-beliefs in their own motivational abilities to help students work together.

Along with teaching and learning resources, the present study indicated that the motivation of teachers during the government policy enactment was also weakened by the lack of support from the local communities in which the new schools were established. This was evident in communities' refusal to allow the school access to local resources. In focus group interviews, for example, teachers from Nyikani School explained that they desperately needed to repair desks and make doors. Even though the village involved was surrounded by forest, villagers refused to allow the school to harvest timber in their forest. As noted earlier, the low value placed upon the new schools by their local communities, especially parents, may be because these communities were either partially or not involved at the preliminary stage of the policy adoption, and therefore had limited understanding of the importance of the new schools for their children. As a result, teachers tended to feel powerless to resolve various practical and academic challenges faced by their schools.

Teachers' sense of inadequacy in the face of such challenges was also apparent in the questionnaire responses (item 2 of factor 3) (see Section 4.2.1). In this item,

most teachers confessed that they lacked confidence to challenge the influence of adverse community attitudes upon student learning. Again, I believe that if local communities had been made aware of the social significance of the new schools, their attitudes may have been different, and they might have been more willing to support these schools. This cooperation between local communities and schools would, in turn, increase teachers' level of confidence in dealing with school-based problems which affected the quality of education delivery (Bandura, 1994; Finnegan, 2013; Kelchtermans, 1996; Zhang & Goodson, 2011).

The study findings also show that although teachers were generally positive about expressing their views on important school matters, some demonstrated a low degree of self-efficacy in influencing the decisions that were made in the school (items 1 and 2 of factor 5) (Section 4.2.1). This raises questions about the ability of heads of schools to involve teachers in decision-making. Demir (2008) asserts that skilled or experienced school leaders strengthen teachers' motivation by engaging them collaboratively in finding solutions to problems related to teaching and learning. Therefore, one possible explanation in relation to this finding is that during the government enactment process, heads of schools were inadequately trained or informed regarding the importance of involving teachers in school decisions. Teachers appeared to believe that if they had had opportunities to be involved in such decisions, they could have offered constructive ideas to enhance the academic performance of their schools.

Pertinent to the above, a study of Smith (2009) on the relationship between school climate and teacher commitment found that teachers feel respected if they are listened to by both school principals and society at large. Thus, it could be suggested that teachers' lack of involvement in professional decisions led them to feel that their ideas didn't matter. This undermined the professional morale and motivation of teachers which, subsequently, lowered their self-efficacy beliefs. This could be one of the factors contributing to poor student academic performance trends. As highlighted in my conceptual framework (see Chapter 2), I anticipated that poor student performance would prompt teachers to exert more effort and commitment to improve this challenging or dire situation. The current research findings, however, found that poor student performance undermined teachers' motivation because they considered themselves incapable of rising to the challenge. DeBruyne

(2001) found in his research that when teachers were unmotivated to teach because of poor student performance, they became stressed and frustrated. These negative physiological and emotional states worsened the teaching effectiveness of teachers. My finding and the work of DeBruyne certainly support Bandura's claims that teachers' self-efficacy beliefs are strengthened when they see that their teaching yields positive results (see Chapter 2).

6.2. Summary

It appears from this study that teachers' feelings about their own abilities to contribute to meaningful student learning in the context of the expansion plan were undermined by two major factors. The first factor related to inadequate funding to implement the project. Budget deficits in the education sector were an obstacle to resourcing new schools, rewarding teaching excellence, and improving the quality of teachers, heads of schools and school inspectors. Additionally, under-funding constrained the Ministry of Education from recruiting more school inspectors and equipping them with the means to regularly visit all schools. Because of this situation, it was difficult for the Ministry to gauge if teachers were fulfilling their professional responsibilities appropriately, especially in relation to their classroom teaching practice.

The second factor was associated with inadequate participation on the part of the government and other stakeholders. The success of the expansion plan was clearly dependent on collaboration from various parties. However, overall the processes for adopting and implementing the plan were dominated by local politics, and thus excluded the viewpoints of educational stakeholders. Both inadequate financial resources and the limited involvement of important educational stakeholders produced difficulties for teachers to effectively perform their work. Based on this study, one might argue that the expansion policy failed at both the national and local level. Possible ways of meeting the challenges which teachers encountered because of this systemic failure will be discussed in the chapter below.

CHAPTER 7: CONCLUSION

This research has attempted to explore factors contributing to enhanced or diminished teacher efficacy as a result of the secondary education expansion plan (see Chapter 1). Certain gaps in the self-efficacy literature and the need to understand the extent to which student performance impacts teacher efficacy were also among the reasons for me to undertake the present study. The study was guided by two, broad research questions:

1. How do a number of Tanzania's community secondary school teachers describe the impact of the government's secondary education expansion policy on teachers' work and professional identity?
2. What salient sources of teachers' self-efficacy emerged in the context of the government's secondary education expansion policy?

As earlier noted (see Chapter 6), findings indicated that eroding self-efficacy on the part of teachers was a consequence of the failure of the government to adequately implement its expansion plan. The findings of this study, therefore, have implications for how the Tanzanian government develops its educational policy. There are also implications of a more theoretical and methodological nature which I will now consider.

Drawing on the previous discussion, I will also provide recommendations for policy and practice, as well as identify some methodological limitations and then suggest areas which would benefit from further research in order to enhance the professionalism of teaching in the Tanzanian context and more generally.

7. 1. Theoretical contribution

Bandura has contended that sources of self-efficacy are not necessarily the same in strength; one can be stronger than others. In most of his writings, he concludes that mastery experience is the most authentic and influential source compared of the three (see Chapter 2). The reason for mastery experiences being the strongest source of information relies upon the fact that this source is unlimited in scope. This means that it extends beyond simply providing information about performance or the results achieved in fulfilling a task; it also provides information about one's abilities. In relation to this emphasis in Bandura's work, the current research adds

an understanding to self-efficacy theory by suggesting that mastery experiences constitute a powerful source of self-efficacy information because they are shaped and reshaped by other sources (see Section 6.1.1).

This study found that teachers interviewed expected that the community and the government would respect them as teachers. There was also a suggestion that at least some teachers desired respect without having to earn it. Teachers also wanted a sense of recognition, privilege and entitlement. As previously noted, Bandura focused his attention on feedback, moral support and trust in explaining social persuasion as a self-efficacy input. This study, therefore, builds on self-efficacy theory by showing that in some contexts a teacher's sense of status is an integral part of verbal or social persuasion which can work to impact on their self-efficacy beliefs (see also Section 5.6). In this regard, one can infer that a number of teachers interviewed were often extrinsically motivated. Apropos to this, the inadequate nature of the government enactment of its expansion policy led to teachers feeling less capable in undertaking their teaching tasks, that is, they felt constrained in terms of their ability to exercise judgment.

Bandura (2001) also argues that physiological states such as positive and negative moods have implications for self-efficacy construction. In most of his writings, however, although Bandura reiterates that physiological and emotional states can enhance or diminish teachers' self-beliefs in relation to their teaching competence, he seems to resist identifying factors responsible for such states. My research, however, observed that being accused, ignored, harmed or victimised, threatened and burdened were factors which caused negative physiological and emotional states in teachers. In theorising these physiological and emotional states, the literature tends to focus on teachers' anxieties around what happens in the classroom and school. As reported earlier (Section 5.4.1), however, the negative views of the profession demonstrated by the local community resulted in teachers at Nyikani School, for example, feeling disenchanted with their occupation. This suggests that there are important sources of physiological and emotional states beyond the classroom and school, and that these are often culturally specific.

The evidence from the literature (see Chapter 2) suggests that Bandura's explanation of the impact of student performance and role models as information

sources of self-efficacy is a narrowly focused one. For Bandura, student performance is mainly related to a teacher's mastery experiences as a self-efficacy source. My study, however, found that alongside affecting mastery experiences, student performance in the context of the expansion plan also produced impacts on the other sources of self-efficacy, particularly social/verbal persuasion, and emotional states. As exemplified by participants (see Chapter 5), teachers' perceived that their happiness and their contentment in their profession (emotional states) as well as their self-esteem or self-respect (social persuasion), deteriorated when their students failed in their National Examinations. Similarly, my findings show that the recruitment of less qualified teachers resulted in highly qualified teachers lacking appropriate colleagues with whom they could interact to enhance their knowledge and skills (see Section 5.1.1). This indicates that role models not only impact on vicarious experience, but also affect teachers' mastery experiences. Therefore, my participants' perceptions provide further evidence that the impact of student performance and role models are not necessarily connected with a single source of self-efficacy.

My research concurs with Vygotsky's views that skills are socially created (Palincsar, 1998; Smith, Dockrell, & Tomlinson, 1997). More particularly, it demonstrates the extent to which teachers' professional networks and their opportunity to interact with authority figures, parents and community organisations impact on their sources of information and consequently their sense of self-efficacy. This study not only generates new knowledge and understanding, but also add to self-efficacy literature in ways that allow other educators to learn and reflect on factors that foster teachers' capacities to become effective professionals in their school settings. My findings are also a useful source of feedback information for policy-makers since they draw attention to the importance of considering issues pertaining to teachers' sense of professionalism in the initial stages of policy formulation. Teachers' endeavours to enhance their perceived roles, identities and competencies contribute to better quality classroom teaching and learning (Hyslop-Margson & Sears, 2010; Lankshear & Knobel, 2005). This can only be realised if policy takes into account matters related to school resourcing, and prioritises ways of improving teacher education and enhancing teachers' professional lives.

7.2. Methodological contribution

This study found a mixed-methods, case-study design an appropriate way to explore, describe and understand teacher efficacy in this particular context. In particular, the quantitative data enhanced my understanding of how teachers perceived themselves as professionals as a consequence of the expansion plan enactment. In addition, the qualitative data captured both how teachers viewed themselves and/or how others viewed them as professionals, their self-beliefs in teaching, and factors contributing to these perceptions. Furthermore, the qualitative data enabled me as a researcher to understand how one government decision or action triggered a range of impacts on sources of self-efficacy information. The identification of factors which was produced by my factor analysis helped me to discover a number of sources of self-efficacy information. For example, factor 3 (resourcing and feedback support), factor 4 (teaching morale) and factor 5 (career and collegial support) in part 1 of the questionnaire became associated with social persuasion (see Section 4.1). Similarly, factor 1 (professional competence) and factor 2 (ease in dealing with students) were respectively related to mastery experience and emotional states. In this regard, it could be argued that factor analysis is a useful strategy for determining salient sources of information in self-efficacy studies.

There are some concerns among researchers that a mixed-methods approach produces complications in incorporating and interpreting interview and questionnaire findings (Hesse-Biber, 2010; Joshi, 2013). To overcome this challenge, a mixed methods approach calls upon the researcher to be creative and curious (Lodico et al., 2006; Teddlie & Tashakkori, 2009) (see also Chapter 3). This feature of the approach encouraged me to integrate key findings from respective data-sets only where I considered it suitable. I believed that integrating qualitative and quantitative findings enhanced my ability to develop lines of reasoning when the results appeared to relate to or even conflict with each other. It was through this process that a broader picture of the policy enactment and its impact on teachers' perceived identities and self-efficacy beliefs in particular emerged.

7.3. Recommendations for policy and practice

This section provides recommendations for policy and practice based on the preceding discussion.

As earlier indicated, the government's secondary education expansion policy placed high emphasis on three priority areas: increasing access, improving equity and enhancing the quality of education. Findings, however, indicate that the performance trends for students from diverse backgrounds were significantly poor. In this regard, government targets in regard to strengthening the quality of education as stipulated in the policy were not met. Therefore, despite the Tanzanian government's belief that the secondary education sector would contribute to the mitigation of chronic poverty (see Chapter 1), little effort was made in relation to teacher preparation and support. This study has suggested that inadequate preparation along with an unsupportive environment adversely affected teachers' perceptions of their own teaching competence and their overall morale.

Currently, the Tanzanian education system encourages secondary-school graduates to be self-reliant and self-employed, and to utilise global market available opportunities. It could be assumed that the government expected that the competence-based curricula introduced during the enactment plan would produce competent students who would be able to cope with a range of life challenges. However, it is unlikely that these students will be competent when their schools are not provided with quality teachers who can assist them to master appropriate skills, with quality assurance mechanisms, and with the resources to facilitate teaching and learning processes. Given these shortcomings, I would argue that community-school, student graduates not only lack the competences central for sustaining their livelihoods but also those competences required for contributing to the socio-economic development of their country. My study, therefore, draws the attention of the government of Tanzania to the importance of adequately funding teacher education, the need for sufficient numbers of high-quality teachers and the involvement of key stakeholders (e.g. parents and community organisations) before adopting educational reforms. I make three major policy recommendations geared towards helping teachers in their identity formation, especially their self-efficacy

development, in order to improve the quality of community secondary schooling and student learning experiences in Tanzania.

Recommendation one: Promote professional learning

Enhancing teacher practice, and therefore students outcomes, requires policies that prioritise professional learning in the context of initial teacher education (qualifications), the provision of effective resourcing, and on-going support (in-service professional development). Each of these is discussed in more detail in the following sections.

Qualifications

The literature suggests that teachers from developing nations receive less pre-service education than their counterparts in other countries (Kitta & Fussy, 2013; The World Bank, 2005) (see Chapter 2). My study discovered that while some teachers in the newly-built schools had the required teaching qualifications (that is, diploma and bachelor degrees), most of them were less effective in teaching because they had been recruited into the profession with low qualifications (see Section 5.1.1). Therefore, for the purpose of developing their competence and improving their work performance, these teachers need be given opportunities to upgrade their teaching qualifications.

During my data collection phase, I found that Tanzania recognised bachelor degrees as the highest level of education for secondary school teachers in order to be considered for promotion and salary increases. It seems that the government feared that if it implemented promotion and salary increases beyond bachelor degrees, many teachers would be motivated to upskill their qualifications, hence leaving schools with a critical shortage of teachers. Evidence thus far suggests that government efforts to expand enrolments in teachers' colleges and universities encouraged both licensed teachers and those with diplomas to upgrade their professional skills. This move by teachers to upskill left schools with an inadequate number of teachers and unable to deliver the full syllabus. Studies (Thomas & Olugbenga, 2012; Worrell et al., 2006) show that there is an association between qualification upgrading and student learning outcomes (see Chapter 2). Therefore, like other professions in Tanzania, the government needs to fine-tune or revise its reward system by including masters and doctoral degree qualifications as desirable

goals for teachers seeking promotion. The government has to ensure that every year a certain number of teachers upgrade their qualifications from either a bachelor's to a master's degrees or from master's to doctoral degrees. I believe that teachers in these categories can be agents for transformation in the education system, as they would stay as teachers and be likely to produce more creative, critical and inquisitive students.

Effective resourcing

Providing upskilling opportunities for less qualified teachers will be meaningless, however, without a governmental initiative to equip schools with teaching and learning resources. Findings revealed that the only source of income in the new schools was the capitation grant from the government, which was allocated according to the number of students the school enrolled. The more students the school had, the bigger the capitation grant they received. In my view, regardless of the number of students a school has, teaching and learning needs in terms of both libraries and laboratories should be consistent across all schools. For this reason, there is a need for the government to review its strategy of disbursing financial resources regardless of the number of students attending a school. This approach would help to reduce variations in teaching and learning development between those teachers whose schools get high amounts of funding because of high enrolment rates, and those teachers whose schools do not.

As discussed previously, a high number of teachers demonstrated negative attitudes towards low-ability students. The negative positioning of “low ability” students by a number of respondents is a teacher problem, not a student problem. It is the teachers' responsibility to help and encourage students to learn and expand their understanding beyond what they know (Masino & Nino-Zarazu, 2016; Peng et al., 2013). Therefore, besides funding the upgrading of qualifications, heads of schools should ensure that both beginning and in-service teachers are trained in how to deal with students of low and mixed abilities. Such training, I believe, will foster the self-efficacy beliefs of teachers working with the most challenging students. Additionally, teacher education institutions must ensure that pre-service teachers develop sufficient pedagogical knowledge and skills to enhance their self-efficacy in relation to managing large classes.

Enhancing support for teachers

For the sake of strengthening the desire, ability, confidence and enthusiasm of teachers to learn, the Ministry of Education, Science and Technology might also think of improving and equipping the Teacher Resource Centres (TRCs) established in the last decades. Effective use of these centres would enable teachers from different schools to meet and learn from one another (Giordano, 2008; Hardman, Ackers, Abrishamian, & O'Sullivan, 2011; Komba & Nkumbi, 2008; Mertens, 2008). In addition, a deliberate effort to ensure that teachers are trained in the use of technologies such as computers and mobile phones in searching for reliable resources for teaching and learning is fundamental. In their investigation of teachers' views on the relationship between technology and aspirational teaching, Froese-Germain, Riel, and McGahey (2013) interviewed 200 and surveyed 4700 Canadian teachers across the country. They found that in-service training regarding the use of Information and Communication Technologies (ICT) helped teachers to construct positive beliefs about their teaching. Similarly, I speculate that training in the proper application of ICTs will aid Tanzanian community secondary school teachers to address teaching challenges, thus increasing their feelings of effectiveness at work.

This study showed that teachers had limited knowledge and skills in how to mobilise community organisations to support the new schools in terms of resourcing. It is, therefore, important for the Ministry of Education, Science and Technology to integrate into teacher education curricula courses that equip pre-service teachers with the skills to compensate for the financial deficits arising from government policies and procedures. The same could be said for in-service teachers, including heads of schools (school principals). I anticipate that once teachers are trained or oriented on how to convince different organisations to support schools, they will be able to obtain the resources crucial for facilitating effective teaching and learning. This practice, in turn, will not only enhance intellectual inquiry, innovation and curiosity amongst teachers but will also promote the development of schools as learning communities (Carpenter, 2015; Lekli & Kaloti, 2015; Saitoa & Tsukui, 2008). Aside from obtaining resources, I believe that if teachers are trained in how to effect community involvement they may also be able to influence pre-service teachers from nearby colleges and universities to support their schools

by teaching subject areas that have been identified as having no, or a shortage of qualified teachers. This will help to balance the teaching workload between science teachers, and humanities and social science teachers.

I have already pointed out that the government was unable to provide continuous professional development to teachers it employed because of financial constraints. Although Jones and O'Brien (2011) suggest that devolution of responsibility in relation to staff professional development programmes is the best strategy (see Chapter 2), this approach was impossible for the new schools in Tanzania, because schools at the local level lacked the resources to generate the income required to make professional learning programmes successful. As an alternative, the government could encourage schools to improvise by initiating various in-house staff development programmes, which are usually less costly. Each school could have its own “teacher career development week”, in which teachers within a school meet and discuss their experiences about appropriate ways of implementing the curriculum. To make this exercise more successful, the heads of schools could invite experienced and expert teachers from nearby schools as facilitators of such events. This would allow all teachers involved to share their experiences and therefore enhance their levels of teaching ability. In addition to career development weeks, the government might establish a more supportive professional environment which ensures that newly employed teachers are exposed to mentoring programmes in the schools they are posted to. Supporting novice teachers contributes to their retention, as they feel more welcomed into their career of choice. Mentoring would also enable new teachers to be more aware of the ethics of teacher professionalism (Craft, 2000; Kadji-Beltran, Zachariou, Liarakou, & Flogaitis, 2014; Shapira-Lishchinsky, 2012; Sugrue, 2004), and hence avoid breaching them as reported by some respondents in this study.

Because grouping teachers in the same location for training seminars and workshops is very expensive, I suggest that the Ministry of Education, Science and Technology utilise multi-point video conferencing. This technology can link together teachers from many schools. In terms of this scenario, teachers are able to see and hear each other online, and hence share knowledge and skills which can expand their repertoires of skills and knowledge (Gautreau et al., 2012; Kennedy, 2016; Marsh & Mitchell, 2014; Sabzian, Gilakjani, & Sodouri, 2013; Tanang &

Abu, 2014). This, however, is only feasible if new schools, especially Nyikani and Bondeni Schools, are equipped with electricity and internet services as promised in the expansion plan. My study found that there was often a misunderstanding among teachers about the rationale for professional development. This was evident when six out of 30 interviewed teachers made it clear that most teachers who were not selected to attend such training felt inferior (negative emotional states), because those who attended always received allowances which helped them to meet their financial obligations. This suggests that some teachers in the new schools were to some extent unprofessional. If they were professional, they would be prepared to engage in professional learning without expecting allowances. Therefore, before being exposed to professional development via multi-point video conferencing technology, teachers themselves have to change their mind-set from looking at the role of continuous in-service training in terms of financial benefits to seeing its intellectual benefits. Along with this, during initial teacher education, pre-service teachers should be made aware that in their professional lives they will be expected to engage with in-service professional development, the sole purpose of which is to enhance their competences in teaching rather than financial gain.

At the initial stage of the enactment plan, teachers were opposed to the Open Performance Review and Appraisal System (OPRAS) as an intermediary system combining both internal and external feedback (see Chapter 1). Nevertheless, a few teachers in my study still believed that such a system was crucial for their professional growth. However, these teachers lamented that despite always filling in the OPRAS forms, they never received any feedback. These teachers expressed a concern that the lack of feedback support from the heads of schools and the employer reduced their morale in relation to teaching. What they wrote down as weaknesses and recommendations were never considered and addressed. This circumstance, in turn, left teachers teaching without a clear focus or goals. Hattie and Timperley (2007), and Voerman, Meijer, Korthagen, and Simons (2015) point out that how teachers interpret feedback is vital to the construction of their self-efficacy beliefs about their teaching, and subsequently contributes to enhanced professional practice. Based on this contention, I also recommend that the Tanzanian government implement and actively act upon the OPRAS system as a

means of gauging teachers' perceived accountability and effectiveness in their teaching.

Recommendation two: Empower community and educational leaders

In conjunction with other studies, my findings noted that parents are important stakeholders in shaping the learning of students. Therefore, complex challenges which affect the quality of secondary education delivery can be addressed by involving local communities (see Chapter 2). These local communities, however, will not take part in these initiatives if they are unaware of the benefits of their involvement. Thus, for the purpose of improving student academic achievement, local communities should be oriented to work with the school. Once these communities understand the significance of the new schools for their children, they will develop a true sense of responsibility towards these schools. Consequently, they will be willing to contribute their labour, financial resources (Aref, 2010) and to work collaboratively with teachers to address student misbehaviour (McCormick et al., 2014; Yuan & Che, 2012). Such an atmosphere will enhance teachers' attitudes towards teaching, since they will feel that the task of influencing student learning is a shared enterprise.

This study found that most teachers in the schools studied were extrinsically motivated to teach. As earlier discussed, however, while the number of schools was increasing, the number of school inspectors, as external feedback providers for teachers, was static. In order to ensure that all schools – and teachers in particular – are inspected by the zonal school inspectors at least once every two years as indicated in the expansion plan, the government should recruit more school inspectors, provide regular inspection training, and provide transportation for the inspectors to visit the schools in their respective areas. Apart from combatting laziness among teachers in performing their work, these inspections would facilitate teachers to gain professional experiences (mastery experience) vital for fostering their sense of efficacy.

In accordance with the ethics of the teaching profession, the first inspection teachers receive is undertaken by the head of school (school principal). Although the government recognised this in the expansion plan and promised that it would familiarise school principals with procedures for school-based supervision, this had

not been effectively implemented. In relation to this state of affairs, it is recommended that the government provide heads of schools with professional development programmes on the importance of involving teachers in decision-making and overall school academic management. The heads of schools' participation in such programmes would help them to recognise the importance of teachers as valuable contributors to school decision-making processes and engage them in achieving both short- and long- term goals of the school. In combination with this, some authors suggest that heads of schools who are exposed to targeted on-going professional development programmes can become competent in helping teachers to create knowledge, and promoting teamwork or collegiality among them (Bizzell, 2011; Houle, 2006; Hussin & Abri, 2015; Ng & Szeto, 2015; Wong, 2004). Teachers who work collaboratively with school principals in improving their teaching "are more likely to remain in the profession because they feel valued and supported in their work" (Mulford, 2003, p. 2). However, in order for such professional development programmes to produce positive outcomes in school leaders, they need to be of high quality.

Findings revealed that seminars and workshops carried out during the expansion plan enactment made little difference to teachers' performance because of the poor quality of the facilitation (Section 5.1.2). For sound professional development, the government should use experienced and competent facilitators. If facilitators are inexperienced, they should be adequately trained prior to their delivering in-service career development. Knowledgeable facilitators would provide opportunities for teachers to share, clarify and add insights about the topic in question (see Chapter 2). This would not only enhance mastery of curriculum content but also help teachers to become more effective in constructing new ways of thinking about and influencing student learning.

Recommendation three: Improve the teaching and learning environment

The government should also acknowledge that there are different types of intelligence in students (Gardner & Hatch, 1989; Maftoon & Sarem, 2012; Visser, Ashton, & Vernon, 2006; Waterhouse, 2006; Zahedi & Ghabanchi, 2014). Some students may be good at science subjects, and others may be good in humanities or social sciences subjects. In this regard, the government, through the Ministry of Education, should also devote attention to channelling capitation grants towards

purchasing teaching and learning resources for humanities and social science subjects. The government decision to direct funds to science subjects only was contrary to the expansion plan promise, which emphasised that new schools would be provided with adequate teaching and learning materials across all subjects. If the government continues to non-prioritise humanities and social science subjects in terms of funding, it is likely that teachers in these areas will produce inadequately prepared students who will make little contribution to the socio-economic development of Tanzania. Consequently, there is the risk that humanities and social science teachers will continue to be blamed and labelled as academically ineffective by their students and the wider society, hence undermining their sense of lifelong teaching commitment and efficacy.

There was evidence that participants regarded well-resourced laboratories as having a positive influence on student subject learning interest. Science teachers claimed that the critical shortage of laboratory resources made it difficult to convince students to develop an interest in science. Apropos of this, there is a need for the government to ensure that new schools are equipped with enough modern science equipment and chemicals in order to help students learn both theoretically and practically. Once this is implemented, more students will be attracted to these subjects, and the nation will be able to get enough science students entering teacher education, and therefore achieve some balance in the teaching workloads in these subjects. In practice, this will improve science teachers' cognitive engagement, as they will have more colleagues with whom to share their experiences and will, as a result, feel more effective in undertaking their work.

Although teachers have a key role in developing a society in academic terms, these same teachers often live and work in inferior situations. The government complains that bright students do not like to join the teaching profession but the source of this reluctance is often the poor working environment their teachers inhabit, which the government is capable of improving. In light of this, the government should improve the living and working conditions of teachers, including providing them with offices and quality housing on school premises. When teachers are provided with such facilities, their feelings of well-being as teachers will improve, and they will be more focused on lesson preparation, which will ultimately lead to an improvement in teaching performance (Cohen & Bhatt, 2012; Derri, Papamitrou,

Vernadakis, Koufou, & Zetou, 2014; Evans, 2008; Green, 2004; Kidger et al., 2016; Robson, 2006; Saaranen, Tossavainen, Ryhänen, & Turunen, 2013). This strategy is also likely to inspire high-achieving secondary school graduates to enrol in teacher education. Such teachers will be a professional resource for less able pre-service teachers and provide a range of vicarious experiences for them as a source of self-efficacy.

7.4. Limitations and directions for future research

Despite the utility of the methodological approach adopted in this study, it had several limitations. While some recommendations for further research will emerge from these limitations, other recommendations will be drawn from the participants' reported perspectives and experiences.

As noted in the methodology chapter, the current study was limited to teachers and school principals (heads of schools). This was for two major reasons. Firstly, I understood that self-efficacy beliefs are constructed from an individual perspective, and therefore they cannot be elucidated or expressed by others. Secondly, I was aware that teachers and heads of schools were the ones who implemented the expansion plan, the impact of which was reflected in student learning outcomes. With reference to my first aforementioned rationale, I would recommend that other individuals should investigate students' experiences and perspectives on how the policy impacted on them, and their self-efficacy as learners in particular. However, owing to the fact that the professional identity and efficacy beliefs of teachers are shaped by the environment with which they interact, one might profitably extend the current research by including local communities. Data from local communities would enable the government to develop suitable strategies and courses of action to influence such communities to support schools in terms of resources so as to improve the quality of educational delivery (Khanal, 2013; Kudomi, Hosogane, & Inui, 1999; Prew, 2009; Price-Mitchell, 2009). In doing so, teachers' competence and pedagogical effectiveness would be enhanced.

MacMillan and Schumacher (1993), Best and Khan (2006) and Mutch (2013) point out that observations, with whatever level of participation, play a significant role in case study design. Since the curriculum reviews during the implementation of the expansion plan went hand in hand with limited in-service training for teachers, other

researchers may undertake a cross-sectional study and adopt observation methods alongside interviews and questionnaires to investigate the complexity of factors impacting on teachers' professional identities and competence. To achieve this, a researcher might select a few teachers based on either their years of service or their professional qualifications to take part in a study. My reason for suggesting this comes from my own perception that what teachers say can be different from what they actually practise in their classroom teaching. I anticipate that through such an approach, researchers will obtain additional data or insights about what actually goes on in the new schools in terms of classroom teaching and learning practices. However, given that teachers are unique in terms of their competencies, data obtained by researcher(s) should not be assumed to be generalisable to other teachers not observed (Wallen & Fraenkel, 2001; Walliman, 2006).

It is clear from the policy document that the implementation of the government's primary education expansion plan intensified pressure for a successful enactment of the secondary education expansion. Therefore, the tendency for students to join secondary education without having basic (foundational) learning skills (see Section 5.5) indicates that the primary school education system was failing and teachers' professionalism, in particular, was being affected. In light of this, further investigation in relation to the effectiveness of the primary education expansion policy and its impact on either students or teachers is warranted. I am of the view that such studies will provide a valuable overall picture of this policy, thereby allowing for a comparison with what is really happening in the new secondary schools as far as teacher efficacy beliefs are concerned.

According to the heads of schools interviewed, many teachers with bachelor degree qualifications lacked the awareness of professionalism exhibited by teachers with diploma qualifications. This might suggest that during their pre-service education the former group of teachers was not fully prepared to become professionals. Whilst in Tanzania the curriculum for diploma pre-service teacher preparation is uniform throughout teachers' colleges, the curriculum for bachelor degree pre-service teachers varies across universities (Hardman et al., 2012; Lindhe, Malmberg, & Temu, 2004; Meena, 2002; Ministry of Education and Vocational Training, 2009). In this regard, a critical discourse analysis of the curriculum, especially in university teacher education, is desirable in order to identify the strengths and shortcomings

of the content involved. Such a study would help researchers to gain a more comprehensive and detailed understanding about how different curriculum constructions impact on teachers' beliefs about their teaching competence when they are posted in schools. Similarly, since the expansion policy prompted the Tanzanian government to expand the enrolment rates in pre-service teacher education (The United Republic of Tanzania, 2010), an exploration of the extent to which this policy affected teacher educators' perceived professional work is of fundamental importance.

My study's main investigative focus was teacher efficacy in the context of the government's enactment of its expansion plan. The scholarly literature indicates that factors which determine the construction of self-efficacy may be different from those of collective efficacy (Tasa, Taggar, & Seijts, 2007). Although numerous studies demonstrate the association between collective efficacy and teaching performance (Dimopoulou, 2014; Goddard, 2001; Goddard et al., 2000), little has yet been learnt about the factors responsible for the development of teacher collective efficacy (Tasa et al., 2007). However, there is evidence in my study which suggests that the expansion plan as implemented impacted on the collective efficacy of teachers. Negative factors included a lack of teachers' spaces (Section 5.2.2), a shortage of science teachers (Sections 5.1.1 and 6.1.5), and a shortage of in-service teacher education (Section 5.1.2). Therefore, owing to my limited findings in relation to this area, there is a need for future researchers to investigate other factors affecting collective self-efficacy among teachers.

The first research question sought to explore the views of Tanzanian community-school teachers on the impact of the secondary expansion enactment policy on their work and professional identity (see Chapter 1). While this study has produced a number of insights into aspects of teachers' work, findings related to aspects of professional identity were limited. Beijaard et al. (2004) assert that professional identity determines how teachers teach, how they grow as professionals and how they feel about changes introduced in the education system. Therefore, a follow-up, qualitative study would be desirable to further explore the implications of the policy for teachers' professional identities. This would allow for the development of an overview of how teachers cope and respond to such changes, and how this impacts on their identities as professionals.

The concept of teacher efficacy was developed in western countries; therefore most research on the topic has been undertaken in the west (Shaukat, 2011; Sridhar & Badiei, 2008; Zhao & Cai, 2017). Teacher efficacy studies in the non-western world, especially the African context, are limited. Since there was limited African, context-specific, prior research to draw on, I had to rely mainly on western literature. Thus, my literature review and conceptual framework were developed in relation to western scholarship. Owing to the fact that self-efficacy is culturally and context specific (Bandura, 1977, 1986), I would suggest that other researchers utilise western literature as a stepping stone only to develop their own frameworks and self-efficacy scales that are contextually relevant to the African context and developing countries generally. It is also easier and clearer for participants to understand and provide reliable responses if a language-specific scale is used. Context-specific scales/tools will add to the body of knowledge around self-efficacy and be available for others to use it. As earlier noted (see Chapter 3), although I believed that Bandura's western-oriented self-efficacy scale would allow me to carry out my study, it eventually proved to be inadequate as it did not capture certain relevant information. This prompted me to move beyond Bandura by undertaking further work to develop another scale which was culturally/contextual specific (see Appendix 14). However, because of time constraints, it was not possible for me to translate the scale into Kiswahili.

Although I have learnt a lot, written a lot and discovered a lot from this study, there are complex questions which are left unanswered: (a) What constitutes professionalism for Tanzanian teachers (i.e., what does it mean to be a professional?) (b) Why do teachers want to be entitled? (c) Do teachers who engage in unethical behaviours such sexual relationships with students deserve to be respected? (d) Is it possible for unprofessional teachers to have self-efficacy? (e) Even if some respondents made comments that their colleagues' engagement in unprofessional behaviours was caused by short courses, why did some teachers who were *fully* prepared also engage in these behaviours? (f) Is it realistic to think that if these teachers were well trained and resourced, they would then act professionally? These questions are important. Teachers can be well educated and feel competent, but student learning can still remain problematic.

7.5. Closing thoughts

As noted earlier, findings suggest that the way the government's secondary education expansion policy was developed, written, enacted and funded had the effect of, at least to some extent, demoralising teachers and undermining the teaching profession. This was evidenced by the lower qualification standards of teachers and the lack of funding resources and teacher professional development. This social positioning of teachers was adversely effected by the nature of their workplace conditions, the perceptions of the community, and students' perceptions and engagement, and as a result, the construction of teacher efficacy beliefs was severely compromised. One might speculate that the government did not consider what would happen as a consequence of a poor implementation plan. Therefore, because the policy was poorly enacted and inadequately implemented, the barriers and challenges teachers in secondary schools were already facing were exacerbated, with a consequent negative effect on student achievement.

To create change in the work lives of teachers and the study lives of students in new schools in Tanzania, it is essential that the government thinks about its policy more broadly. Reshaping the expansion policy in ways that enhance the self-efficacy beliefs of teachers to increase their levels of professionalism and make teaching an appealing job is critical. If teacher efficacy is low, teachers are likely to perform poorly. Conversely, when teachers enjoy a sense of high self-efficacy, the opposite can be anticipated.

Given the limited success of the expansion plan in addressing the disparity in education outcomes for young people in Tanzania, several recommendations for enhancing the plan need to be considered. A starting point would be to tighten the recruitment process for, and the delivery of, initial teacher education programmes. Immediate measures with regard to revising teacher selection entry criteria for prospective teachers is crucial in making a difference to the enactment of the expansion policy and the lived experiences of teachers. This requires teachers' colleges and universities to stop enrolling students who do not meet the B+ entry requirement. The subsequent reduction in the numbers of enrolments will also support teacher educators to provide more targeted learning opportunities that extend future teachers abilities, as opposed to spending time re-teaching high school

content. In addition, this should provide further opportunities for teacher educators to emphasis aspects related to the nature and practice of teaching, and in doing so raise levels of professional standards among the Tanzanian teaching community.

In conjunction with a stronger platform in initial teacher education, it is essential that measures are put in place to ensure teachers have opportunities for on-going engagement in professional learning and reflective practice, as a way of maintaining and enhancing professional standards. Moreover, school principals need to encourage teachers' willingness to learn from one another in order to develop professionally, while at the same time holding teachers to account if they do not adhere to professional standards.

While it is tempting to lay the responsibility for improved teacher efficacy and teaching standards with the government, initial teacher educators, and school principals, teachers themselves must first and foremost take more responsibility. This requires teachers, like those in this study, to move beyond blaming others when things do not work, and instead recognise and reflect on their responsibility to the students they teach, the communities they serve, and the nation.

Improving secondary school education in Tanzania and the expansion plan in particular, will require the collaborative efforts of all stakeholders in the education sector. Failure to act will limit opportunities for all concerned and the development of Tanzanian society.

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APPENDICES

Appendix 1: District Executive Director's introduction letter and information sheet

My name is Godlove Lawrent, a doctoral student at the University of Waikato (New Zealand). I am conducting a research titled “the government’s secondary education expansion in Tanzania and its implications for teachers’ sense of efficacy” as a requirement of my doctoral degree. In Tanzania, several studies have been carried out to examine the factors for the poor performance of secondary school students. However, there is no study conducted to investigate how the government’s secondary education expansion has impacted upon teachers’ sense of efficacy. Therefore, I would like to ask for your permission to conduct my research in some of the community secondary schools which are located within your district.

The main participants in my research are teachers. Overall, data collection will be conducted over six months and the data will be collected through the use of face-to-face interviews, documentary reviews and questionnaires. Teachers participating in the face-to-face interviews will be selected on the basis of teaching experience and the subject they teach. However, the head of each secondary school will be automatically involved in the dialogue. All teachers in the sampled school will be invited to complete questionnaires. While interviews will take approximately 80 to 120 minutes, the questionnaire will take no more than 45 minutes. Suitable time slots to undertake the study will be negotiable in order to avoid any interruption of their teaching schedules. I am confident that any information offered by your teachers in the course of my research will be valuable in enhancing the quality of secondary education delivery in our country.

Teachers’ participation in this study is completely voluntary and they may withdraw from the study or may withdraw their data at any time prior to it being analysed. The face-to-face dialogue will be audio-recorded subject to your teachers’ consent. I will be ready to take notes if teachers are uncomfortable with being recorded. Any information offered by teachers in the course of the dialogue will be kept strictly confidential and no one else will have access to this information except the researcher and research supervisors. Although all measures will be taken to maintain confidentiality, this cannot be guaranteed. The gathered data will be used for producing the thesis and part of it may be used in writing academic papers or in presentations at workshops and conferences. My thesis will be made available on the University of Waikato’s Research Commons digital repository after it has been submitted, examined and passed.

Should you require any further information, you can either contact my Chief supervisor, Professor Terry Locke on locketj@waikato.ac.nz, or me on gl66@students.waikato.ac.nz. The consent form is attached with this letter. Signing the form indicates your agreement for me to conduct research in your district. Thank you very much for your support and cooperation.
Godlove Lawrent

Appendix 2: District Executive Director's consent form

Research:

Secondary education expansion in Tanzania: Policy and practice implications for teachers' sense of efficacy

I as District Executive Director (DED) in the district, have been given and have read all the information of the study conducted by Godlove Lawrent. Any question I have asked him about the project has been satisfactorily answered.

I understand that:

- All answers and any information from records will be kept entirely confidential, and no one will be identifiable in the final report (thesis) and any scholarly publications or presentations which can arise from this research.
- Teachers' participation is completely voluntary and they can withdraw from the study or withdraw the data at any time without penalty.
- Teachers who are going to be involved in a group discussion will not be able to amend the transcripts owing to the collective nature of knowledge constructed in the interactive process
- The thesis will be made available on the University of Waikato's Research Common digital repository after it has been submitted, examined and passed.
- The information might be used in other scholarly publications and/or presentations

I understand signing this form indicates my agreement to him conducting of the research in the district

.....
(Signature)

.....
(Date)

Appendix 3: Head of school introduction letter and information sheet

My name is Godlove Lawrent, a doctoral student at the University of Waikato (New Zealand). I am conducting a research titled “the government’s secondary education expansion in Tanzania and its implications for teachers’ of sense efficacy” as a requirement of my doctoral degree. Therefore, I would like to ask for your permission to conduct my research in your school. Your teachers have been chosen to take part in my study because they have been involved in the implementation of the policy and thus they have first-hand experience of its effects.

The main participants in my research are teachers. Overall, data collection will be conducted over 6 months and the data will be collected through the use of interviews, documentary reviews and questionnaires. Teachers participating in the interviews will be selected on the basis of teaching experience, gender and the subject they teach. However, you as a head of secondary school will be automatically involved in my dialogue. All teachers in your school will be invited to complete the questionnaires. While interviews will take approximately time 80 to 120 minutes, the questionnaire will take no more than 45 minutes. Suitable time slots to undertake the study will be negotiable in order to avoid any interruption of teaching schedules. I am confident that any information offered by your teachers in the course of my research will be valuable in enhancing the quality of education delivery in our country.

Teachers’ participation in this study is completely voluntary and they may withdraw from the study or may withdraw their data at any time prior to being analysed. The face-to-face dialogue will be audio-recorded subject to your teachers’ consent. I will be ready to take notes if participants are uncomfortable with being recorded. Any information offered by teachers in the course of the dialogue will be kept strictly confidential and no one else will have access to this information except my research supervisors. Although all measures will be taken to maintain confidentiality, this cannot be guaranteed. The gathered data will be used for producing the thesis and part of it may be used in writing academic papers or in presenting at workshops and conferences. My thesis will be made available on the University of Waikato’s Research Commons digital repository after it has been submitted, examined and passed.

Should you require any further information, you can either contact my Chief supervisor, Professor Terry Locke on loketj@waikato.ac.nz or me on gl66@students.waikato.ac.nz. The consent form is attached with this letter. Signing the form indicates your agreement for me to conduct research in your school.

Thank you very much for your support and cooperation.
Godlove Lawrent

Appendix 4: Head of school consent form

Research:

Secondary education expansion in Tanzania: Policy and practice implications for teachers' sense of efficacy

I as the head of school of secondary school, have been given and have read all the information of the study conducted by Godlove Lawrent. Any question I have asked him about the project has been satisfactorily answered.

I understand that:

- All answers and any information from records will be kept entirely confidential, and no one will be identifiable in the final report (thesis) and any scholarly publications or presentations which can arise from this research.
- Teachers' participation is completely voluntary and they may withdraw from the study at any time
- My teachers may withdraw the data at any time without penalty.
- Teachers who are going to be involved in a group discussion will not be able to amend the transcripts owing to the collective nature of knowledge constructed in the interactive process
- The thesis will be made available on the University of Waikato's Research Common digital repository after it has been submitted, examined and passed.
- The information might be used in other scholarly publications and/or presentations

I understand signing this form indicates my agreement to him conducting of the research in the school

.....

(Signature)

.....

(Date)

Appendix 5: Participant introduction letter and information sheet

My name is Godlove Lawrent, a doctoral student at the University of Waikato (New Zealand). I am conducting a research titled “the government’s secondary education expansion in Tanzania and its implications for teacher efficacy” as a requirement of my doctoral degree. I would like to ask you to be a participant in my research conducted at your school. Specifically, I would like to understand what you experience and what you think, feel and perceive about the secondary education expansion policy as far as the teaching and learning processes are concerned. You have been chosen to take part in my study because you have been involved in implementation of the policy and thus you have first-hand experience of its effects.

Overall, data collection will be conducted over 6 months and the data will be collected through the use of interviews, documentary reviews and questionnaires. Teachers to participate in the interviews will be selected on the basis of teaching experience and the subject they teach. In this case, two teachers with at least 10 years of teaching experience will be invited to take part in one-to-one interviews. Basing on subject of teaching, two science and two humanities and social science teachers will be invited to participate in the focus group interviews. All teachers in your school will be invited to complete questionnaires. While interviews will take approximately 80 to 120 minutes, the questionnaire will take no more than 45 minutes. Suitable time slots to undertake the study will be negotiable in order to avoid any interruption to your teaching schedule.

Participation in this study is completely voluntary and will not by any means affect your status in the school. You may withdraw from the study at any time without penalty. Educational authority figures will not be informed of those who participate and those who do not. The interviews will be audio-recorded subject to your consent. I will be ready to take notes if you are uncomfortable with being recorded. Should you opt to participate, the information you offer in the course of the dialogue will be kept strictly confidential through the use of pseudonymous and no one else will have access to this information except my research supervisors. Although all measures will be taken to maintain confidentiality, this cannot be guaranteed. The gathered data will be used for producing the thesis and part of it may be used in writing academic papers or in presenting at workshops and conferences. My thesis will be made available on the University of Waikato’s Research Commons digital repository after it has been submitted, examined and passed.

Should you require any further information or have any disputes, you can either contact my Chief supervisor, Professor Terry Locke on loketj@waikato.ac.nz or me on gl66@students.waikato.ac.nz. The consent form is attached with this letter. Signing the form indicates your agreement to participate in my research.

I kindly respect and greatly appreciate your willingness to participate in this study
Godlove Lawrent

Appendix 6: Participant consent form

Research:

Secondary education expansion in Tanzania: Policy and practice implications for teachers' sense of efficacy

I as a teacher of secondary school, have been given and have read all the information of the study conducted by Godlove Lawrent. Any question I have asked him about the project has been satisfactorily answered.

I understand that:

- All answers and any information from records will be kept entirely confidential, and no one will be identifiable in the final report (thesis) and any scholarly publications or presentations which can arise from this research.
- My participation is completely voluntary and I may withdraw from the study at any time
- I may withdraw the data at any time prior to it being analysed.
- Teachers who are going to be involved in a group discussion will not be able to amend the transcripts owing to the collective nature of knowledge constructed in the interactive process
- The thesis will be made available on the University of Waikato's Research Common digital repository after it has been submitted, examined and passed.
- The information might be used in other scholarly publications and/or presentations

Signing this form indicates my agreement to participate in this research

I agree to*: (*Please tick √*)

Yes

No

Have my interviews audio-recorded

***If you tick a "no" next to the above sentence, I will be ready to take notes during the interviews.**

.....
(Signature)

.....
(Date)

Appendix 7: Professional language translator introduction letter and information sheet

Dear Sir/Madam

My name is Godlove Lawrent, a doctoral student at the University of Waikato (New Zealand). I am conducting research as a requirement of my doctoral degree. My data is mainly gathered through the use of individual interviews and focus group interviews. To ensure mutual understanding, participants and I negotiated a language to be used in the dialogue. In this regard, some participants felt comfortable to converse in Kiswahili (our national language). While some information is tape recorded, others are hand written. As an expert of both Kiswahili and English, I would like to ask you to translate my Kiswahili gathered data into English and to maintain the confidentiality of this data.

The consent form is attached with this letter. Signing the form indicates your acceptance that you will keep the data strictly confidential.

Thank you very much for accepting my request

Godlove Lawrent

Appendix 8: Professional language translator confidentiality form

I as an expert of English and Kiswahili, have been given and have read all the information of the study conducted by Mr Godlove Lawrent. Therefore, I accept his request of translating the gathered data from Kiswahili to English. I understand that signing this form indicates my agreement to keep the information strictly confidential.

.....
(Signature)

.....
(Date)

Appendix 9: Ethical approval

Dean's Office
Faculty of Education
Te Kura Toi Tangata
The University of Waikato
Private Bag 3105
Hamilton, New Zealand

Phone +64 7 838 4500
www.waikato.ac.nz



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

MEMORANDUM

To: Godlove Lawrent
cc: Professor Terry Locke
Dr Karen Barbour
From: Dr Nicola Daly
Chairperson (Acting), Research Ethics Committee
Date: 30 September 2014
Subject: Supervised Postgraduate Research – Application for Ethical Approval (EDU077/14)

Thank you for submitting the amendments to your application for ethical approval for the research project:

**Secondary education expansion in Tanzania:
Policy and practice implications for teachers' sense of efficacy**

I am pleased to advise that your application has received ethical approval.

Please note that researchers are asked to consult with the Faculty's Research Ethics Committee in the first instance if any changes to the approved research design are proposed.

The Committee wishes you all the best with your research.

Dr Nicola Daly
Chairperson (Acting)
Research Ethics Committee

Appendix 10: Permission/invitation letters

MUFINDI DISTRICT COUNCIL

HEAD OFFICE P. O. BOX . 223, TEL. 026 – 2772614, FAX 026 – 2772070 / 2772118



MAFINGA

REF. NO. HW/MUF/S.50/1748

21/11/.2014

HEADS OF SCHOOL
MUFINDI DISTRICT COUNCIL
MAFINGA

RE: INTRODUCTORY LETTER AND INFORMATION SHEET.

Reference is made to the caption above.

I am honoured to introduce to you Heads of Schools Mister Godlove Lawrent, a doctoral student at the University of Waikato (New Zealand). He is conducting a research titled “THE GOVERNMENT’S SECONDARY EDUCATION EXPANSION IN TANZANIA AND ITS IMPLICATIONS FOR TEACHERS’ SENSE OF EFFICACY”

Is through researches that useful information concerning our day to day obligations can be gathered and properly channeled for positive response and improvement.

Is my hope that you will accord him with the necessary cooperation that will enable him to achieve his endeavour.

With Best Regards.


A.R. KOMBA

FOR: DISTRICT EXECUTIVE DIRECTOR
MUFINDI DISTRICT COUNCIL

FOR: DISTRICT EXECUTIVE DIRECTOR
MUFINDI

IRINGA MUNICIPAL COUNCIL

Tell: Na : 026 -2702647
Fax Na : 026 - 2702203



Iringa Municipal Office,
P. O. Box 162,
IRINGA.

REF. No. IMC/L.30/18/VOL.I/57

26/11/2014

TO:
HEADS OF SCHOOLS,
IRINGA MUNICIPAL COUNCIL.

Dear Sir/Madam

**REF: A RESEARCH PERMIT FOR GODLOVE LAWRENT TO CARRY OUT A
FIELD RESEARCH AT YOUR SCHOOL.**

The Municipal Director has granted a permit for Godlove Lawrent who is a student of the University of WAIKATO and at the moment is conducting research.

The title of the research is **"Secondary Education Expansion in Tanzania: Policy and practice implications for teacher' sense of efficacy"**.

I kindly ask you to give him any helpful support in order to succeed in his course.

.....
Devota Luwungo

**For: MUNICIPAL DIRECTOR
IRINGA**

**MKURUGENZI WA MAFUPA
IRINGA**

**PRIME MINISTER'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT
IRINGA DISTRICT COUNCIL**



Phone No: 026 2702558, 026 2702828
Fax 026 2701776
All the letter should be written to:
District Executive Director

P.O.Box 108,
IRINGA.

Ref. No. SEC/ED.10/1/47

26 November, 2014

THE HEADMASTER'S/HEADMISTRESS,
SECONDARY SCHOOLS,
IRINGA DISTRICT COUNCIL,
P.O. Box 108,
IRINGA.

**RE: A PERMIT FOR MR. GODLOVE LAWRENT A DOCTORAOL STUDENT
AT THE UNIVERSITY OF WAIKATO (NEW ZEALAND) TO CARRY OUT AN
EDUCATIONAL STUDY IN OUR SCHOOLS**

The aforementioned person who is a student of University of Waikato (New Zealand) is granted a permit by the District Executive Director to carry out a study titled " **The government's secondary education expansion in Tanzania and its implications for the teachers' sense of efficacy**".

Given that this is an indispensable assignment in the course of fulfilling the requirements for the award of Doctoral degree you are kindly asked to avail him any needful cooperation and support which will enhance smooth realization of the objectives of his study.

I wish you all the best.

L.F Msigwa

For: **DISTRICT EXECUTIVE DIRECTOR
IRINGA**

KILOLO DISTRICT COUNCIL

Telephone: 0262968010/0785261723
Fax: 0262968010
Website: www.Kilolodistrict.go.tz
Email: dedkilolo@Iringa.go.tz



P.O. BOX 2324,
KILOLO,
Tanzania

REF.NO.KDC/E.6/4VOLL II/286

12, Novemba, 2014

TO WHOM MAY CONCERN:

RE: TO INTRODUCE MR GODLOVE LAWRENT TO YOUR SECONDARY SCHOOL

The above heading is referred.

The above named person is conducting a research in our District Council titled "The Government's secondary education expansion in Tanzania and its implications for teachers' sense of efficacy."

You are advised to avail him of any necessary assistance he may wish to have to enable him to collect the required data from your School.

Your sincerely.

UPEMBA E.J.A
FOR: DISTRICT EXECUTIVE DIRECTOR
KILOLO

Copy to: Mr. Godlove Lawrent

All correspondence letter should be addressed to District Executive Director

Appendix 11: Individual interview schedule with the heads of schools

Questions related to teachers

1. How many teachers do you have in your school?
2. How would you describe the workload of your teachers? How does this affect the teaching and learning processes?
3. Do teachers in your school have the required teaching qualifications? How does this affect your school and the teaching profession?
4. Do you believe that your teachers can develop good students in the subject (s) they teach? Why do you think so?
5. How would you describe the status of teaching and learning materials in your school? How do these influence the teaching and learning processes in your school?
6. What initiatives do your teachers take to ensure effective teaching and learning?
7. Can you explain about the nature of academic performance of your school? Why do you believe your school performs well/poorly? How does this performance affect your school and teachers?
8. How often do your teachers attend in-service professional development programmes? How does this influence the ability of your teachers to deliver their subject matter effectively?
9. How do you evaluate your teachers' performance? How does this affect your school and the teaching profession?
10. Are teachers in your school being promoted on time? Do you think this has an impact on your teachers and the school? How?

Questions related to administration

11. Do the school inspectors have a tendency to regularly visit your school and provide feedback to teachers? How does this situation affect your school and the teachers' ability to teach?
12. What is your perception about the current government's initiative to recruit many school graduates to enter the teaching profession?
13. How would you describe the teaching and learning environment in your school? How do these affect your teachers and the school?
14. How often do teachers and you meet with parents? What sorts of issues are raised in these meetings? How do these interactions affect the teaching and learning processes?
15. Do you think your school receives a sufficient level of support to carry out teaching and learning? Do you think this affects your school?
16. What are the current challenges facing your teachers? Explain how these influence the teaching profession?
17. What factors have affected your ability to achieve the school's goals? How?
18. To what extent has the increase of secondary schools affected schooling and your ability to do your job?
19. Do you have anything else that you want to share?

Appendix 12: Suggested questions for individual interviews with teachers

Session 1

1. How many subjects do you teach?
2. How would you describe your teaching workload? How does this affect the teaching and learning processes?
3. How do you promote student learning in your school?
4. Does the head of the school appraise your teaching process? How frequent is this done? How does this influence your teaching and learning processes?
5. How would you describe the teaching and learning environment in your school? How do these affect you and your school?
6. How would you describe the status of teaching and learning materials in your school? How do these influence the teaching and learning processes in your school?
7. Does your school have sufficient classrooms? How does this enhance or impede effective teaching and learning?
8. What initiatives do you take to ensure effective teaching and learning?
9. Are you prepared enough to implement curricula changes? What obstacles (if any) do you face in implementing the changes? How does the level of preparation affect you and your school?
10. Can you explain about the nature of academic performance of your school? Why do you believe your school performs well/poorly? How does this performance affect you and your school?

Session 2

11. How often do you attend in-service professional development programmes? How do these influence your ability to deliver the subject matter effectively?
12. Do the school inspectors have a tendency to regularly visit your school and provide feedback about teaching and learning progress? How does this situation affect your ability to teach?
13. Have you been promoted on time? Do you think this has an impact on you and your school? How
14. How often do you meet with parents? What sorts of issues are raised in these meetings? How do these interactions affect your teaching and learning processes?
15. Do you think your school receives a sufficient level of support to carry out teaching and learning? Do you think this affects your school?
16. What are the current challenges facing you as teachers? Explain how these influence your teaching profession?
17. To what extent has the increase of secondary schools affected schooling and your ability to do your job?
18. Do you have anything else that you want to share?

Appendix 13: Focus group interview schedule for teachers

Session 1

1. How many subjects do you teach?
2. How would you describe your teaching workload? How does this affect the teaching and learning processes?
3. How do you promote student learning in your school?
4. Does the head of the school appraise your teaching process? How frequent is this done? How does this influence your teaching and learning processes?
5. How would you describe the teaching and learning environment in your school? How do these affect you and your school?
6. How would you describe the status of teaching and learning materials in your school? How do these influence the teaching and learning processes in your school?
7. Does your school have sufficient classrooms? How does this enhance or impede effective teaching and learning?
8. What initiatives do you take to ensure effective teaching and learning?
9. Are you prepared enough to implement curricula changes? What obstacles (if any) do you face in implementing the changes? How does the level of preparation affect you and your school?
10. Can you explain about the nature of performance of your school? Why do you believe your school performs well/poorly? How does this performance affect you and your school?

Session 2

11. How often do you attend in-service professional development programmes? How do these influence your ability to deliver the subject matter effectively?
12. Do the school inspectors have a tendency to regularly visit your school and provide feedback about teaching and learning progress? How does this situation affect your ability to teach?
13. Have you been promoted on time? Do you think this has an impact on you and your school? How
14. How often do you meet with parents? What sorts of issues are raised in these meetings? How do these interactions affect your teaching and learning processes?
15. Do you think your school receives a sufficient level of support to carry out teaching and learning? Do you think this affects your school?
16. What are the current challenges facing you as teachers? Explain how these affect your teaching profession?
17. To what extent has the increase of secondary schools affected schooling and your ability to do your job?
18. Do you have anything else that you want to share?

Appendix 14: Questionnaire

1. School.....
2. Subjects your teaching (a) Sciences (b) Humanities and social sciences
3. Gender (a) Male (b) Female
4. Number of years in teaching.....
5. Teaching qualification (a) Diploma (b) Bachelor degree (c) Master degree (d) PhD

PART I: Please read in each statement and tick the box which best shows how you feel

	Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My school has adequate resources to facilitate teaching and learning processes					
2	My school has sufficient classrooms needed to influence meaningful student learning					
3	My school has good and well equipped offices for teacher lesson preparation					
4	I find teaching a rewarding and respected profession					
5	I feel less comfortable when I teach large classes					
6	I feel less confident to influence effective learning in my class because of student discipline problems					
7	I feel exhausted with classroom teaching and other school activities					
8	There is no recognition for my good teaching and extra activities I do in this school					
9	I feel reluctant to teach less motivated students					
10	I have sufficient knowledge and skills to produce meaningful student learning					
11	I need more training to know how to deal with my students					
12	School inspectors visit my school regularly and provide constructive feedback that enhance my teaching					
13	My head of school always observe classroom teaching and provides useful feedback					
14	I lack opportunities to attend workshops, conferences and seminars to improve my teaching when changes are initiated in my subject (s)					
15	I possess enough subject knowledge to bring significant student learning					
16	I think teaching performance evaluation is important in improving my teaching and learning					
17	I always receive mentoring, advice and guidance about teaching improvement from more experienced and qualified others					
18	The community helps us to ensure that our students learn effectively					
19	I have always been promoted appropriately					
20	My school creates an environment that is supportive to enable more successful teaching and learning					

PART II: Bandura's teacher self-efficacy scale

Please indicate your opinions about each of the statements below by putting a tick in the appropriate box. Your answers will be kept strictly confidential and will not be identified by name.

	Item	Nothing	Very little	Some influence	Quite a bit	A great deal
1	How much can you influence the decision making that are made in the school?					
2	How much can you express your views on important school matters					
3	How much can you do to get the instructional materials and equipment you need?					
4	How much can you do to influence the class size in your school?					
5	How much can you do to get through the most difficult students?					
6	How much can you do to promote learning when there is lack of support from the parents or guardians?					
7	How much can you do to keep students on task on difficult assignments?					
8	How much can you do to increase students' memory of what they have been taught in previous lessons?					
9	How much can you do to motivate students who show low interests in school work					
10	How much can you do to get students to work together?					
11	How much can you do to overcome the influence adverse community conditions on students' learning					
12	How much can you do to get children to do their work?					
13	How much can you do to get children to follow classroom rules?					
14	How much can you do to control disruptive behaviour in the classroom?					
15	How much can you do to prevent problem behaviour on the school grounds?					
16	How much can you do to get parents to become involved in school activities?					
17	How much can you assist parents in helping their children to do well in school?					
18	How much can you do to make parents feel comfortable coming to school?					
19	How much can you do to get community groups involved in working with the school?					
20	How much can you do to get religious organizations such as churches involved in working with the school?					
21	How much can you do to get business people involved in working with the schools?					
22	How much can you do to get local colleges and universities involved in working with the school?					

23	How much can you do to make the school as a safe place?					
24	How much can you do to make students enjoy coming to school?					
25	How much can you do to get students to trust teachers?					
26	How much can you help other teachers with their teaching skills?					
27	How much can you do to enhance collaboration between teachers and administration to make the school run effectively?					
28	How much can you do to reduce school dropout?					
29	How much can you do to reduce school absenteeism?					
30	How much can you get students to believe they can do well in school work?					

21. Why do you believe your school performs well/poorly?

.....

.....

22. How does the student performance affect you and your school?

.....

.....

23. How do the regular curriculum reviews affect your teaching and learning processes?

.....

.....

24. To what extent has the increase of secondary schools affected schooling and your ability to do your job well?

.....

.....

25. I will appreciate to get other additional comments you may have

Appendix 15: Questionnaire demographic information

Name of school	Teacher	Gender	subject	Years of service	Teaching qualifications
Mafanikio	1	Male	Humanities and Social Sciences	12	Bachelor degree
	2	Male	Humanities and Social Sciences	1	Bachelor's degree
	3	Male	Humanities and Social Sciences	10	Bachelor's degree
	4	Female	Humanities and Social Sciences	2	Bachelor's degree
	5	Female	Humanities and Social Sciences	1	Bachelor's degree
	6	Female	Humanities and Social Sciences	2	Bachelor's degree
	7	Male	Sciences	12	Bachelor's degree
	8	Male	Sciences	29	Bachelor's degree
	9	Female	Sciences	10	Bachelor's degree
	10	Male	Humanities and Social Sciences	12	Bachelor's degree
	11	Male	Humanities and Social Sciences	1	Bachelor's degree
	12	Male	Humanities and Social Sciences	1	Bachelor's degree
	13	Female	Humanities and Social Sciences	3	Bachelor's degree
	14	Male	Humanities and Social Sciences	20	Bachelor's degree
	15	Male	Sciences	2	Diploma
	16	Female	Humanities and Social Sciences	4	Bachelor's degree
	17	Male	Humanities and Social Sciences	7	Bachelor's degree
	18	Male	Humanities and Social Sciences	4	Bachelor's degree
	19	Male	Humanities and Social Sciences	1	Bachelor's degree
	20	Male	Humanities and Social Sciences	1	Bachelor's degree
	21	Male	Humanities and Social Sciences	4	Bachelor's degree
	22	Female	Humanities and Social Sciences	3	Bachelor's degree
	23	Male	Humanities and Social Sciences	1	Bachelor's degree
	24	Female	Humanities and Social Sciences	3	Bachelor's degree
	25	Male	Humanities and Social Sciences	7	Bachelor's degree

Appendix 15: cont.

Name of school	Teacher	Gender	Subject	Years of service	Teaching qualifications
Chuoni	26	Male	Humanities and social sciences	30	Bachelor's degree
	27	Female	Humanities and social sciences	20	Bachelor's degree
	28	Female	Sciences	10	Bachelor's degree
	29	Male	Humanities and social sciences	33	Bachelor's degree
	30	Male	Humanities and social sciences	20	Bachelor's degree
	31	Male	Humanities and social sciences	13	Bachelor's degree
	32	Male	Humanities and social sciences	9	Bachelor's degree
	33	Male	Humanities and social sciences	20	Bachelor's degree
	34	Female	Humanities and social sciences	7	Bachelor's degree
	35	Male	Humanities and social sciences	10	Diploma
	36	Male	Sciences	8	Bachelor's degree
	37	Male	Humanities and social sciences	12	Bachelor's degree
	38	Female	Sciences	7	Bachelor's degree
	39	Male	Humanities and social sciences	21	Bachelor's degree
	40	Female	Sciences	5	Bachelor's degree
Nyikani	41	Female	Humanities and social sciences	9	Bachelor's degree
	42	Male	Sciences	1	Bachelor's degree
	43	Male	Humanities and social sciences	12	Diploma
	44	Female	Humanities and social sciences	2	Bachelor's degree
	45	Male	Humanities and social sciences	1	Diploma
	46	Male	Humanities and social sciences	3	Bachelor's degree
	47	Female	Humanities and social sciences	9	Bachelor's degree
	48	Female	Humanities and social sciences	1	Bachelor's degree
	49	Male	Humanities and social sciences	5	Bachelor's degree
	50	Female	Humanities and social sciences	10	Bachelor's degree

	51	Male	Sciences	1	Bachelor's degree
	52	Male	Humanities and social sciences	9	Bachelor's degree
	53	Male	Humanities and social sciences	12	Bachelor's degree
	54	Male	Humanities and social sciences	2	Diploma
	55	Male	Humanities and social sciences	6	Bachelor's degree
	56	Male	Sciences	14	Bachelor's degree
Bondeni	57	Male	Sciences	1	Bachelor's degree
	58	Female	Humanities and social sciences	1	Bachelor's degree
	59	Female	Humanities and social sciences	13	Diploma
	60	Male	Humanities and social sciences	2	Bachelor's degree
	61	Female	Humanities and social sciences	2	Diploma
	62	Male	Humanities and social sciences	4	Bachelor's degree
	63	Female	Humanities and social sciences	1	Bachelor's degree
	64	Male	Humanities and social sciences	1	Diploma
	65	Male	Humanities and social sciences	3	Bachelor's degree
	66	Male	Humanities and social sciences	6	Bachelor's degree
	67	Male	Humanities and social sciences	5	Bachelor's degree
	68	Male	Humanities and social sciences	10	Diploma
	69	Male	sciences	6	Bachelor's degree

Appendix 16: Questionnaire part 1-frequencies and percentage tables

Table A16.1. I have sufficient skills to produce meaningful student learning

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	2 (13.3%)	0 (0.0%)	1 (6.7%)	3 (20%)	9 (60%)	15 (100%)
	Humanities and Social sciences	3 (5.6%)	0 (0.0%)	5 (9.3%)	22 (40.7%)	24 (44.4%)	54 (100%)
Gender	Male	4 (8.3%)	0 (0.0%)	4 (8.3%)	15 (31.3%)	25 (52.1%)	48 (100%)
	Female	1 (4.8%)	0 (0.0%)	2 (9.5%)	10 (47.6%)	8 (38.1%)	21 (100%)
Years of service	1-9	2 (4.3%)	0 (0.0%)	5 (10.9%)	16 (34.8%)	23 (50%)	46 (100%)
	10-19	2 (13.3%)	0 (0.0%)	1 (6.7%)	5 (33.3%)	7 (46.7%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (50%)	3 (50%)	6 (100%)
	30-39	1 (50%)	0 (0.0%)	0 (0.0%)	1 (50%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	0 (0.0%)	1 (9.1%)	8 (72.7%)	2 (18.2%)	11 (100%)
	Bachelor Degree	1 (1.9%)	2 (3.7%)	3 (5.6%)	22 (40.7%)	26 (48.1%)	54 (100%)
	Master Degree	1 (25%)	0 (0.0%)	0 (0.0%)	2 (50%)	1 (25%)	4 (100%)

Table A16.2: I possess enough subject knowledge to influence student learning

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	1 (6.7%)	1 (6.7%)	1 (6.7%)	7 (46.7%)	5 (33.3%)	15 (100%)
	Humanities and Social Sciences	1 (1.9%)	1 (1.9%)	3 (5.6%)	25 (46.3%)	24 (44.4%)	54 (100%)
Gender	Male	2 (4.2%)	2 (4.2%)	2 (4.2%)	23 (47.9%)	19 (39.6%)	48 (100%)
	Female	0 (0.0%)	0 (0.0%)	2 (9.5%)	9 (42.9%)	10 (47.6%)	21 (100%)
Years of service	1-9	1 (2.2%)	1 (2.2%)	4 (8.7%)	19 (41.3%)	21 (45.7%)	46 (100%)
	10-19	0 (0.0%)	1 (6.7%)	0 (0.0%)	9 (60%)	5 (33.3%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (66.7%)	2 (33.3%)	6 (100%)
	30-39	1 (50%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	0 (0.0%)	1 (9.1%)	8 (72.7%)	2 (18.2%)	11 (100%)
	Bachelor Degree	1 (1.9%)	2 (3.7%)	3 (5.6%)	22 (40.7%)	26 (48.1%)	54 (100%)
	Master Degree	1 (25%)	0 (0.0%)	0 (0.0%)	2 (50%)	1 (25%)	4 (100%)

Table A16.3: I think teaching performance evaluation is important

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	1 (6.7%)	0 (0.0%)	0 (0.0%)	5 (33.3%)	9 (60%)	15 (100%)
	Humanities and Social Sciences	1 (1.9%)	0 (0.0%)	2 (3.7%)	21 (38.9%)	30 (55.6%)	54 (100%)
Gender	Male	2 (4.2%)	0 (0.0%)	2 (4.2%)	14 (29.2%)	30 (62.5%)	48 (100%)
	Female	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (57.1%)	9 (42.9%)	21 (100%)
Years of service	1-9	0 (0.0%)	0 (0.0%)	2 (4.3%)	13 (28.3%)	31 (67.4%)	46 (100%)
	10-19	1 (6.7%)	0 (0.0%)	0 (0.0%)	9 (60%)	5 (33.3%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (50%)	3 (50%)	6 (100%)
	30-39	1 (50%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	0 (0.0%)	1 (9.1%)	4 (36.4%)	6 (54.5%)	11 (100%)
	Bachelor Degree	1 (1.9%)	0 (0.0%)	1 (1.9%)	20 (37%)	32 (59.3%)	54 (100%)
	Master Degree	1 (25%)	0 (0.0%)	0 (0.0%)	2 (50%)	1 (25%)	4 (100%)

Table A16.4: I feel less comfortable when I teach large classes

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	1 (6.7%)	2 (13.3%)	3 (20%)	3 (20%)	6 (40%)	15 (100%)
	Humanities and Social Sciences	4 (7.4%)	5 (9.3%)	9 (16.7%)	18 (33.3%)	18 (33.3%)	54 (100%)
Gender	Male	4 (8.3%)	5 (10.4%)	6 (12.5%)	14 (29.2%)	19 (39.6%)	48 (100%)
	Female	1 (4.8%)	2 (9.5%)	6 (28.6%)	7 (33.3%)	5 (23.8%)	21 (100%)
Years of service	1-9	3 (6.5%)	6 (13%)	11 (23.9%)	10 (21.7%)	16 (34.8%)	46 (100%)
	10-19	1 (6.7%)	1 (6.7%)	0 (0.0%)	7 (46.7%)	6 (40%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	1 (16.7%)	4 (66.7%)	1 (16.7%)	6 (100%)
	30-39	1 (50%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	1 (9.1%)	2 (18.2%)	1 (9.1%)	3 (27.3%)	4 (36.4%)	11 (100%)
	Bachelor Degree	3 (5.6%)	5 (9.3%)	11 (20.4%)	16 (29.6%)	19 (35.2%)	54 (100%)
	Master Degree	1 (25%)	1 (25%)	0 (0.0%)	2 (50%)	0 (0.0%)	4 (100%)

Table A16.5: I need more training to know how to deal with students

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	0 (0.0%)	0 (0.0%)	3 (20%)	9 (60%)	3 (20%)	15 (100%)
	Humanities and Social Sciences	2 (3.7%)	3 (5.6%)	10 (18.5%)	19 (35.2%)	20 (37%)	54 (100%)
Gender	Male	1 (2.1%)	3 (6.2%)	8 (16.7%)	20 (41.7%)	16 (33.3%)	48 (100%)
	Female	1 (4.8%)	0 (0.0%)	5 (23.8%)	8 (38.1%)	7 (33.3%)	21 (100%)
Years of service	1-9	1 (2.2%)	2 (4.3%)	12 (26.1%)	12 (26.1%)	19 (41.3%)	46 (100%)
	10-19	0 (0.0%)	1 (6.7%)	1 (6.7%)	11 (73.3%)	2 (13.3%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	0 (0.0%)	5 (83.3%)	1 (16.7%)	6 (100%)
	30-39	1 (50%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	1 (9.1%)	2 (18.2%)	5 (45.5%)	3 (27.3%)	11 (100%)
	Bachelor Degree	1 (1.9%)	2 (3.7%)	11 (20.4%)	22 (40.7%)	1 (833.3%)	54 (100%)
	Master Degree	1 (25%)	0 (0.0%)	0 (0.0%)	1 (25%)	2 (50%)	4 (100%)

Table A16.6: My school has adequate and quality teaching and learning resources

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	0 (0.0%)	3 (20%)	4 (26.7%)	6 (40%)	2 (13.3%)	15 (100%)
	Humanities and Social Sciences	1 (1.9%)	9 (16.7%)	24 (44.4%)	16 (29.6%)	4 (7.4%)	54 (100%)
Gender	Male	0 (0.0%)	10 (20.8%)	16 (33.3%)	18 (37.5%)	4 (8.3%)	48 (100%)
	Female	1 (4.8%)	2 (9.5%)	12 (57.1%)	4 (19%)	2 (9.5%)	21 (100%)
Years of service	1-9	1 (2.2%)	7 (15.2%)	21 (45.7%)	11 (23.9%)	6 (13%)	46 (100%)
	10-19	0 (0.0%)	3 (20%)	3 (20%)	9 (60%)	0 (0.0%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	4 (66.7%)	1 (16.7%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	1 (50%)	0 (0.0%)	1 (50%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	1 (9.1%)	5 (45.5%)	4 (36.4%)	1 (9.1%)	11 (100%)
	Bachelor Degree	1 (1.9%)	10 (18.5%)	23 (42.6%)	15 (27.8%)	5 (9.5%)	54 (100%)
	Master Degree	0 (0.0%)	1 (25%)	0 (0.0%)	3 (75%)	0 (0.0%)	4 (100%)

Table A16.7: My heads of school always observes classroom teaching and provides feedback

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	1 (6.7%)	4 (26.7%)	2 (13.3%)	4 (26.7%)	4 (26.7%)	15 (100%)
	Humanities and Social Sciences	1 (1.9%)	5 (9.3%)	11 (20.4%)	26 (48.1%)	11 (20.4%)	54 (100%)
Gender	Male	2 (4.2%)	7 (14.6%)	10 (20.8%)	20 (41.7%)	9 (18.8%)	48 (100%)
	Female	0 (0.0%)	2 (9.5%)	3 (14.3%)	10 (47.6%)	6 (28.6%)	21 (100%)
Years of service	1-9	1 (2.2%)	4 (8.7%)	8 (17.4%)	19 (41.3%)	14 (30.4%)	46 (100%)
	10-19	1 (6.7%)	3 (20%)	2 (13.3%)	9 (60%)	0 (0.0%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	3 (50%)	1 (16.7%)	1 (16.7%)	6 (100%)
	30-39	0 (0.0%)	1 (50%)	0 (0.0%)	1 (50%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	1 (9.1%)	2 (18.2%)	6 (54.5%)	2 (18.2%)	11 (100%)
	Bachelor degree	2 (3.7%)	7 (13%)	11 (20.4%)	21 (38.9%)	13 (24.1%)	54 (100%)
	Master degree	0 (0.0%)	1 (25%)	0 (0.0%)	3 (75%)	0 (0.0%)	4 (100%)

Table A16.8: School inspectors visit my school regularly and provide feedback

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	0 (0.0%)	6 (40%)	2 (13.3%)	6 (40%)	1 (6.7%)	15 (100%)
	Humanities and Social Sciences	4 (7.4%)	4 (7.4%)	13 (24.1%)	22 (40.7%)	11 (20.4%)	54 (100%)
Gender	Male	2 (4.2%)	7 (14.6%)	10 (20.8%)	21 (43.8%)	8 (16.7%)	48 (100%)
	Female	2 (9.5%)	3 (14.3%)	5 (23.8%)	7 (33.3%)	4 (19%)	21 (100%)
Years of service	1-9	2 (4.3%)	5 (10.9%)	12 (26.1%)	17 (37%)	10 (21.7%)	46 (100%)
	10-19	2 (13.3%)	3 (20%)	4 (26.7%)	6 (40%)	0 (0.0%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	3 (50%)	1 (16.7%)	1 (16.7%)	6 (100%)
	30-39	1 (50%)	1 (50%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	1 (9.1%)	1 (9.1%)	1 (9.1%)	7 (63.6%)	1 (9.1%)	11 (100%)
	Bachelor Degree	3 (5.6%)	8 (14.8%)	14 (25.9%)	18 (33.3%)	11 (20.4%)	54 (100%)
	Master Degree	0 (0.0%)	1 (25%)	0 (0.0%)	3 (75%)	0 (0.0%)	4 (100%)

Table A16.9: I feel less confident to influence effective learning in my class because of student discipline problem

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	2 (13.3%)	4 (26.7%)	1 (6.7%)	5 (33.3%)	3 (20%)	15 (100%)
	Humanities and Social Sciences	5 (9.3%)	15 (27.8%)	14 (25.9%)	17 (31.5%)	3 (5.6%)	54 (100%)
Gender	Male	5 (10.4%)	14 (29.2%)	10 (20.8%)	14 (29.2%)	5 (10.4%)	48 (100%)
	Female	2 (9.5%)	5 (23.8%)	5 (23.8%)	8 (38.1%)	1 (4.8%)	21 (100%)
Years of service	1-9	5 (10.9%)	9 (19.6%)	14 (30.4%)	15 (32.6%)	3 (6.5%)	46 (100%)
	10-19	0 (0.0%)	8 (53.3%)	1 (6.7%)	5 (33.3%)	1 (6.7%)	15 (100%)
	20-29	1 (16.7%)	1 (16.7%)	0 (0.0%)	2 (33.3%)	2 (33.3%)	6 (100%)
	30-39	1 (50%)	1 (50%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	2 (18.2%)	5 (45.5%)	1 (9.1%)	2 (18.2%)	1 (9.1%)	11 (100%)
	Bachelor Degree	4 (7.4%)	13 (24.1%)	12 (22.2%)	20 (37%)	5 (9.3%)	54 (100%)
	Master Degree	1 (25%)	0 (0.0%)	2 (50%)	1 (25%)	0 (0.0%)	4 (100%)

Table A16.10: I feel exhausted with classroom teaching and other school activities

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	1 (6.7%)	3 (20%)	4 (26.7%)	5 (33.3%)	2 (13.3%)	15 (100%)
	Humanities and Social Sciences	5 (9.3%)	17 (31.5%)	11 (20.4%)	18 (33.3%)	3 (5.6%)	54 (100%)
Gender	Male	4 (8.3%)	19 (39.6%)	7 (14.6%)	14 (29.2%)	4 (8.3%)	48 (100%)
	Female	2 (9.5%)	1 (4.8%)	8 (31.8%)	9 (42.9%)	1 (4.8%)	21 (100%)
Years of service	1-9	6 (13%)	13 (28.3%)	11 (23.9%)	13 (28.3%)	3 (6.5%)	46 (100%)
	10-19	0 (0.0%)	4 (26.7%)	3 (20%)	8 (53.3%)	0 (0.0%)	15 (100%)
	20-29	0 (0.0%)	2 (33.3%)	1 (16.7%)	2 (33.3%)	1 (16.7%)	6 (100%)
	30-39	0 (0.0%)	1 (50%)	0 (0.0%)	0 (0.0%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	1 (9.1%)	3 (27.3%)	1 (9.1%)	5 (45.5%)	1 (9.1%)	11 (100%)
	Bachelor Degree	5 (9.3%)	16 (29.6%)	14 (25.9%)	17 (31.5%)	2 (3.7%)	54 (100%)
	Master Degree	0 (0.0%)	1 (25%)	0 (0.0%)	1 (25%)	2 (50%)	4 (100%)

Table A16.11: I always been promoted appropriately

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	3 (20%)	7 (46.7%)	3 (20%)	1 (6.7%)	1 (6.7%)	15 (100%)
	Humanities and Social Sciences	15 (27.8%)	19 (35.2%)	14 (25.9%)	2 (3.7%)	4 (7.4%)	54 (100%)
Gender	Male	9 (18.8%)	23 (47.9%)	12 (25%)	2 (4.2%)	2 (4.2%)	48 (100%)
	Female	9 (42.9%)	3 (14.3%)	5 (23.8%)	1 (4.8%)	3 (14.3%)	21 (100%)
Years of service	1-9	15 (32.6%)	15 (32.6%)	14 (30.4%)	1 (2.2%)	1 (2.2%)	46 (100%)
	10-19	3 (20%)	6 (40%)	1 (6.7%)	2 (13.3%)	3 (20%)	15 (100%)
	20-29	0 (0.0%)	4 (66.7%)	1 (16.7%)	0 (0.0%)	1 (16.7%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	2 (100%)	0 (0.0%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	1 (9.1%)	7 (63.6%)	2 (18.2%)	1 (9.1%)	0 (0.0%)	11 (100%)
	Bachelor Degree	16 (29.6%)	18 (33.3%)	14 (25.9%)	2 (3.7%)	4 (7.4%)	54 (100%)
	Master Degree	1 (25%)	1 (25%)	1 (25%)	0 (0.0%)	1 (25%)	4 (100%)

Table A16.12: My school creates an environment that is supportive and helpful

Demographics		Responses					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Subject areas	Sciences	2 (13.3%)	2 (13.3%)	4 (26.7%)	5 (33.3%)	2 (13.3%)	15 (100%)
	Humanities and Social Sciences	6 (11.1%)	9 (16.7%)	19 (35.2%)	14 (25.9%)	6 (11.1%)	54 (100%)
Gender	Male	4 (8.3%)	9 (18.8%)	18 (37.5%)	12 (25%)	5 (10.4%)	48 (100%)
	Female	4 (19%)	2 (9.5%)	5 (23.8%)	7 (33.3%)	3 (14.3%)	21 (100%)
Years of service	1-9	8 (17.4%)	5 (10.9%)	13 (28.3%)	13 (28.3%)	7 (15.2%)	46 (100%)
	10-19	0 (0.0%)	4 (26.7%)	4 (26.7%)	6 (40%)	1 (6.7%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	5 (83.3%)	0 (0.0%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	2 (100%)	0 (0.0%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	2 (18.2%)	2 (18.2%)	3 (27.3%)	2 (18.2%)	2 (18.2%)	11 (100%)
	Bachelor Degree	6 (11.1%)	7 (13%)	19 (35.2%)	16 (29.6%)	6 (11.1%)	54 (100%)
	Master Degree	0 (0.0%)	2 (50%)	1 (25%)	1 (25%)	0 (0.0%)	4 (100%)

Appendix 17: Questionnaire part 2-Frequencies and percentage tables

Table A17.1: How much can you do to control disruptive behaviour in the classroom?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	2 (13.3%)	0 (0.0%)	1 (6.7%)	12 (80%)	15 (100%)
	Humanities and Social Sciences	0 (0.0%)	1 (9.1%)	5 (9.3%)	18 (33.3%)	30 (55.6%)	54 (100%)
Gender	Male	0 (0.0%)	3 (6.2%)	5 (10.4%)	9 (18.8%)	31 (64.6%)	48 (100%)
	Female	0 (0.0%)	0 (0.0%)	0 (0.0%)	10 (47.6%)	11 (52.4%)	21 (100%)
Years of service	1-9	0 (0.0%)	2 (4.3%)	3 (6.5%)	14 (30.4%)	27 (58.7%)	46 (100%)
	10-19	0 (0.0%)	0 (0.0%)	2 (13.3%)	3 (20%)	10 (66.7%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	0 (0.0%)	2 (33.3%)	3 (50%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (9.1%)	10 (90.9%)	11 (100%)
	Bachelor Degree	0 (0.0%)	3 (5.6%)	5 (9.3%)	16 (29.6%)	30 (55.6%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (50%)	2 (50%)	4 (100%)

Table A17.2: How much can you do to make students enjoy coming to school?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	2 (13.3%)	0 (0.0%)	6 (40%)	7 (46.7%)	15 (100%)
	Humanities and Social Sciences	0 (0.0%)	1 (1.9%)	7 (13%)	19 (35.2%)	27 (50%)	54 (100%)
Gender	Male	0 (0.0%)	2 (4.2%)	5 (10.4%)	18 (37.5%)	23 (47.9%)	48 (100%)
	Female	0 (0.0%)	1 (4.8%)	2 (9.5%)	7 (33.3%)	11 (52.4%)	21 (100%)
Years of service	1-9	0 (0.0%)	2 (4.3%)	3 (6.5%)	12 (26.1%)	29 (63%)	46 (100%)
	10-19	0 (0.0%)	0 (0.0%)	4 (26.7%)	8 (53.3%)	3 (20%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	0 (0.0%)	5 (83.3%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	0 (0.0%)	2 (18.2%)	2 (18.2%)	7 (63.6%)	11 (100%)
	Bachelor Degree	0 (0.0%)	3 (5.6%)	4 (7.4%)	23 (42.6%)	24 (44.4%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	1 (25%)	0 (0.0%)	3 (75%)	4 (100%)

Table A17.3: How much can you do to get students to believe they can do well in school work?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	1 (6.7%)	2 (13.3%)	3 (20%)	9 (60%)	15 (100%)
	Humanities and Social Sciences	0 (0.0%)	0 (0.0%)	7 (13%)	16 (29.6%)	31 (57.4%)	54 (100%)
Gender	Male	0 (0.0%)	1 (2.1%)	7 (14.6%)	13 (27.1%)	27 (56.2%)	48 (100%)
	Female	0 (0.0%)	0 (0.0%)	2 (9.5%)	6 (28.6%)	13 (61.9%)	21 (100%)
Years of service	1-9	0 (0.0%)	1 (2.2%)	4 (8.7%)	11 (23.9%)	30 (65.2%)	46 (100%)
	10-19	0 (0.0%)	0 (0.0%)	4 (26.7%)	4 (26.7%)	7 (46.7%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	1 (16.7%)	3 (50%)	2 (33.3%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (18.2%)	9 (81.8%)	11 (100%)
	Bachelor Degree	0 (0.0%)	1 (1.9%)	8 (14.8%)	15 (27.8%)	30 (55.6%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	1 (25%)	2 (50%)	1 (25%)	4 (100%)

Table A17.4: How much can you do to get community groups involved in school activities?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	3 (20%)	2 (13.3%)	5 (33.3%)	1 (6.7%)	4 (26.7%)	15 (100%)
	Humanities and Social Sciences	2 (3.7%)	6 (11.1%)	24 (44.4%)	17 (31.5%)	5 (9.3%)	54 (100%)
Gender	Male	2 (4.2%)	7 (14.6%)	20 (41.7%)	12 (25%)	7 (14.6%)	48 (100%)
	Female	3 (14.3%)	1 (4.8%)	9 (42.9%)	6 (28.6%)	2 (9.5%)	21 (100%)
Years of service	1-9	4 (8.7%)	6 (13%)	18 (39.1%)	11 (23.9%)	7 (15.2%)	46 (100%)
	10-19	1 (6.7%)	1 (6.7%)	7 (46.7%)	5 (33.3%)	1 (6.7%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	3 (50%)	1 (16.7%)	1 (16.7%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	2 (100%)	0 (0.0%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	1 (9.1%)	2 (18.2%)	3 (27.3%)	3 (27.3%)	2 (18.2%)	11 (100%)
	Bachelor Degree	4 (7.4%)	6 (11.1%)	23 (42.6%)	14 (25.9%)	7 (13%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	3 (75%)	1 (25%)	0 (0.0%)	4 (100%)

Table A17.5: How much can you do to get businesses involved in working with the school?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	3 (20%)	3 (20%)	7 (46.7%)	2 (13.3%)	0 (0.0%)	15 (100%)
	Humanities and Social Sciences	4 (7.4%)	15 (27.8%)	17 (31.5%)	13 (24.1%)	5 (9.3%)	54 (100%)
Gender	Male	4 (8.3%)	12 (25%)	17 (35.4%)	11 (22.9%)	4 (8.3%)	48 (100%)
	Female	3 (14.3%)	6 (28.6%)	7 (33.3%)	4 (19%)	1 (4.8%)	21 (100%)
Years of service	1-9	5 (10.9%)	10 (21.7%)	17 (37%)	9 (19.6%)	5 (10.9%)	46 (100%)
	10-19	2 (13.3%)	3 (20%)	6 (40%)	4 (26.7%)	0 (0.0%)	15 (100%)
	20-29	0 (0.0%)	4 (66.7%)	1 (16.7%)	1 (16.7%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	2 (100%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	1 (9.1%)	4 (36.4%)	3 (27.3%)	2 (18.2%)	1 (9.1%)	11 (100%)
	Bachelor Degree	6 (11.1%)	13 (24.1%)	19 (35.2%)	12 (22.2%)	4 (7.4%)	54 (100%)
	Master Degree	0 (0.0%)	1 (25%)	2 (50%)	1 (25%)	0 (0.0%)	4 (100%)

Table A17.6: How much can you do to get local colleges and universities involved working with the school in school?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	5 (33.3%)	2 (13.3%)	2 (13.3%)	5 (33.3%)	1 (6.7%)	15 (100%)
	Humanities and Social Sciences	11 (20.4%)	14 (25.9%)	14 (25.9%)	9 (16.7%)	6 (11.1%)	54 (100%)
Gender	Male	11 (22.9%)	12 (25%)	10 (20.8%)	11 (22.9%)	4 (8.3%)	48 (100%)
	Female	5 (23.8%)	4 (19%)	6 (28.6%)	3 (14.3%)	3 (14.3%)	21 (100%)
Years of service	1-9	13 (28.3%)	10 (21.7%)	10 (21.7%)	9 (19.6%)	4 (8.7%)	46 (100%)
	10-19	2 (13.3%)	3 (20%)	4 (26.7%)	4 (26.7%)	2 (13.3%)	15 (100%)
	20-29	1 (16.7%)	3 (50%)	1 (16.7%)	0 (0.0%)	1 (16.7%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	4 (36.4%)	3 (27.3%)	1 (9.1%)	2 (18.2%)	1 (9.1%)	11 (100%)
	Bachelor Degree	12 (22.2%)	13 (24.1%)	13 (24.1%)	10 (18.5%)	6 (11.1%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	2 (50%)	2 (50%)	0 (0.0%)	4 (100%)

Table A17.7: How much can you do to get students to work together?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	2 (13.3%)	4 (26.7%)	1 (6.7%)	8 (53.3%)	15 (100%)
	Humanities and Social Sciences	0 (0.0%)	2 (3.7%)	12 (22.2%)	15 (27.8%)	25 (46.3%)	54 (100%)
Gender	Male	0 (0.0%)	3 (6.2%)	13 (27.1%)	12 (25%)	20 (41.7%)	48 (100%)
	Female	0 (0.0%)	1 (4.8%)	3 (14.3%)	4 (19%)	13 (61.9%)	21 (100%)
Years of service	1-9	0 (0.0%)	2 (4.3%)	11 (23.9%)	9 (19.6%)	24 (52.2%)	46 (100%)
	10-19	0 (0.0%)	1 (6.7%)	4 (26.7%)	4 (26.7%)	6 (40%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	1 (16.7%)	2 (33.3%)	2 (33.3%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	0 (0.0%)	4 (36.4%)	3 (27.3%)	4 (36.4%)	11 (100%)
	Bachelor Degree	0 (0.0%)	4 (7.4%)	12 (22.2%)	11 (20.4%)	27 (50%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (50%)	2 (50%)	4 (100%)

Table A17.8: How much can you do to overcome the influence of adverse community conditions on student learning?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	1 (6.7%)	3 (20%)	7 (46.7%)	4 (26.7%)	15 (100%)
	Humanities and Social Sciences	1 (1.9%)	12 (22.2%)	20 (37%)	15 (27.8%)	6 (11.1%)	54 (100%)
Gender	Male	1 (2.1%)	9 (18.8%)	17 (35.4%)	13 (27.1%)	8 (16.7%)	48 (100%)
	Female	0 (0.0%)	4 (19%)	6 (28.6%)	9 (42.9%)	2 (9.5%)	21 (100%)
Years of service	1-9	1 (2.2%)	9 (19.6%)	16 (34.8%)	13 (28.3%)	7 (15.2%)	46 (100%)
	10-19	0 (0.0%)	1 (6.7%)	4 (26.7%)	7 (46.7%)	3 (20%)	15 (100%)
	20-29	0 (0.0%)	3 (50%)	2 (33.3%)	1 (16.7%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	1 (50%)	1 (50%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	1 (9.1%)	6 (54.6%)	0 (0.0%)	4 (36.4%)	11 (100%)
	Bachelor Degree	1 (1.9%)	12 (22.2%)	19 (35.2%)	17 (31.5%)	5 (9.3%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	1 (25%)	2 (50%)	1 (25%)	4 (100%)

Table A17.9: How much can you do to get children to do their homework?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	0 (0.0%)	4 (26.7%)	2 (13.3%)	9 (60%)	15 (100%)
	Humanities and Social Sciences	0 (0.0%)	1 (1.9%)	10 (18.5%)	14 (25.9%)	29 (53.7%)	54 (100%)
Gender	Male	0 (0.0%)	1 (2.1%)	12 (25%)	9 (18.8%)	26 (54.2%)	48 (100%)
	Female	0 (0.0%)	0 (0.0%)	2 (9.5%)	7 (33.3%)	12 (57.1%)	21 (100%)
Years of service	1-9	0 (0.0%)	1 (2.2%)	6 (13%)	12 (26.1%)	27 (58.7%)	46 (100%)
	10-19	0 (0.0%)	0 (0.0%)	6 (40%)	3 (20%)	6 (40%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	2 (33.3%)	1 (16.7%)	3 (50%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	1 (9.1%)	3 (27.3%)	1 (9.1%)	6 (54.5%)	11 (100%)
	Bachelor Degree	0 (0.0%)	0 (0.0%)	11 (20.4%)	14 (25.9%)	29 (53.7%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (25%)	3 (75%)	4 (100%)

Table A17.10: How much can you assist parents in helping their children do well in school?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	1 (6.7%)	1 (6.7%)	9 (60%)	4 (27%)	15 (100%)
	Humanities and Social Sciences	2 (3.7%)	5 (9.3%)	24 (44%)	14 (26%)	9 (17%)	54 (100%)
Gender	Male	0 (0.0%)	4 (8%)	16 (33%)	17 (35%)	11 (23%)	48 (100%)
	Female	2 (9.5%)	2 (9.5%)	9 (42.9%)	6 (28.6%)	2 (9.5%)	21 (100%)
Years of service	1-9	1 (2.2%)	5 (10.9%)	19 (41.3%)	12 (26.1%)	9 (19.6%)	46 (100%)
	10-19	1 (6.7%)	1 (6.7%)	3 (20%)	7 (46.7%)	3 (20%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	3 (50%)	3 (50%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	1 (9.1%)	3 (27.3%)	3 (27.3%)	4 (36.4%)	11 (100%)
	Bachelor Degree	2 (3.7%)	5 (9.3%)	20 (37%)	19 (35.2%)	8 (14.8%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	2 (50%)	1 (25%)	1 (25%)	4 (100%)

Table A17.11: How much can you make parents feel comfortable coming to school?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	1 (6.7%)	1 (6.7%)	2 (13.3%)	7 (46.7%)	4 (26.7%)	15 (100%)
	Humanities and Social Sciences	0 (0.0%)	1 (11.1%)	13 (24.1%)	19 (35.2%)	16 (29.6%)	54 (100%)
Gender	Male	1 (2.1%)	4 (8.3%)	10 (20.8%)	18 (37.5%)	15 (31.2%)	48 (100%)
	Female	0 (0.0%)	3 (14.3%)	5 (23.8%)	8 (38.1%)	5 (23.8%)	21 (100%)
Years of service	1-9	1 (2.2%)	4 (8.7%)	10 (21.7%)	15 (32.6%)	16 (34.8%)	46 (100%)
	10-19	0 (0.0%)	2 (13.3%)	3 (20%)	7 (46.7%)	3 (20%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	2 (33.3%)	3 (50%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50%)	1 (50%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	2 (18.2%)	3 (27.3%)	4 (36.4%)	2 (18.2%)	11 (100%)
	Bachelor Degree	1 (1.9%)	5 (9.3%)	11 (20.4%)	21 (38.9%)	16 (29.6%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	1 (25%)	1 (25%)	2 (50%)	4 (100%)

Table A17.12: How much can you do to get parents become involved in school activities?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	1 (6.7%)	2 (13.3%)	3 (20%)	6 (40%)	3 (20%)	15 (100%)
	Humanities and Social Sciences	4 (7.4%)	7 (13%)	18 (33.3%)	17 (31.5%)	8 (14.8%)	54 (100%)
Gender	Male	3 (6.2%)	8 (16.7%)	12 (25%)	15 (31.2%)	10 (20.8%)	48 (100%)
	Female	2 (9.5%)	1 (4.8%)	9 (42.9%)	8 (38.1%)	1 (4.8%)	21 (100%)
Years of service	1-9	3 (6.5%)	5 (10.9%)	16 (34.8%)	14 (30.4%)	8 (17.4%)	46 (100%)
	10-19	1 (6.7%)	0 (0.0%)	5 (33.3%)	7 (46.7%)	2 (13.3%)	15 (100%)
	20-29	1 (16.7%)	3 (50%)	0 (0.0%)	2 (33.3%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0)	0 (0.0%)	0 (0.0%)	2 (100%)	2 (100%)
Teaching qualifications	Diploma	2 (18.2%)	2 (18.2%)	3 (27.3%)	2 (18.2%)	2 (18.2%)	11 (100%)
	Bachelor Degree	3 (5.6%)	6 (11.1%)	18 (33.3%)	20 (37%)	7 (13%)	54 (100%)
	Master Degree	0 (0.0%)	1 (25%)	1 (25%)	0 (0.0%)	2 (50%)	4 (100%)

Table A17.13: How much can you influence the decisions that are made in the school?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	2 (13.3%)	6 (40%)	2 (13.3%)	5 (33.3%)	15 (100%)
	Humanities and Social Sciences	0 (0.0%)	9 (16.7%)	20 (37%)	12 (22.2%)	13 (24.1%)	54 (100%)
Gender	Male	0 (0.0%)	9 (18.8%)	15 (31.2%)	9 (18.8%)	15 (31.2%)	48 (100%)
	Female	0 (0.0%)	2 (9.5%)	11 (52.4%)	5 (23.8%)	3 (14.3%)	21 (100%)
Years of service	1-9	0 (0.0%)	9 (19.6%)	16 (34.8%)	10 (21.7%)	11 (23.9%)	46 (100%)
	10-19	0 (0.0%)	1 (6.7%)	7 (46.7%)	4 (26.7%)	3 (20%)	15 (100%)
	20-29	0 (0.0%)	1 (16.7%)	3 (50%)	0 (0.0%)	2 (33.3%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	1 (9.1%)	4 (36.4%)	0 (0.0%)	6 (54.5%)	11 (100%)
	Bachelor Degree	0 (0.0%)	10 (18.5%)	22 (40.7%)	14 (25.9%)	8 (14.8%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (100%)	4 (100%)

Table A17.14: How much can you express your views freely on important school matters?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	0 (0.0%)	4 (26.7%)	3 (20%)	8 (53.3%)	15 (100%)
	Humanities and Social Sciences	2 (3.7%)	6 (11.1%)	11 (20.4%)	10 (18.5%)	25 (46.3%)	54 (100%)
Gender	Male	2 (4.2%)	5 (10.4%)	10 (20.8%)	7 (14.6%)	24 (50%)	48 (100%)
	Female	0 (0.0%)	1 (4.8%)	5 (23.8%)	6 (28.6%)	9 (42.9%)	21 (100%)
Years of service	1-9	1 (2.2%)	5 (10.9%)	12 (26.1%)	10 (21.7%)	18 (39.1%)	46 (100%)
	10-19	0 (0.0%)	1 (6.7%)	2 (13.3%)	1 (6.7%)	11 (73.3%)	15 (100%)
	20-29	1 (16.7%)	0 (0.0%)	1 (16.7%)	2 (33.3%)	2 (33.3%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	1 (9.1%)	3 (27.3%)	0 (0.0%)	7 (63.6%)	11 (100%)
	Bachelor Degree	2 (3.7%)	5 (9.3%)	12 (22.2%)	13 (24.1%)	22 (40.7%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (100%)	4 (100%)

Table A17.15: How much can you get through to the most difficult students?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	2 (13.3%)	4 (26.7%)	5 (33.3%)	4 (26.7%)	15 (100%)
	Humanities and Social Sciences	1 (1.9%)	7 (13%)	21 (38.9%)	14 (25.9%)	11 (20.4%)	54 (100%)
Gender	Male	1 (2.1%)	6 (12.5%)	19 (39.6%)	12 (25%)	10 (20.8%)	48 (100%)
	Female	0 (0.0%)	3 (14.3%)	6 (28.6%)	7 (33.3%)	5 (23.8%)	21 (100%)
Years of service	1-9	1 (2.2%)	8 (17.4%)	14 (30.4%)	14 (30.4%)	9 (19.6%)	46 (100%)
	10-19	0 (0.0%)	1 (6.7%)	6 (40%)	2 (13.3%)	6 (40%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	5 (83.3%)	1 (16.7%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)	0 (0.0%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	2 (18.2%)	4 (36.4%)	2 (18.2%)	3 (27.3%)	11 (100%)
	Bachelor Degree	0 (0.0%)	7 (13%)	21 (38.9%)	15 (27.8%)	11 (20.4%)	54 (100%)
	Master Degree	1 (25%)	0 (0.0%)	0 (0.0%)	2 (50%)	1 (25%)	4 (100%)

Table A17.16: How much can you do to motivate students who show low interest in schoolwork?

Demographics		Responses					Total
		Nothing	Very little	Some influence	Quite a bit	A great deal	
Subject areas	Sciences	0 (0.0%)	1 (6.7%)	3 (20%)	6 (40%)	5 (33.3%)	15 (100%)
	Humanities and Social Sciences	0 (0.0%)	3 (5.6%)	16 (29.6%)	15 (27.8%)	20 (37%)	54 (100%)
Gender	Male	0 (0.0%)	1 (2.1%)	15 (31.2%)	15 (31.2%)	17 (35.4%)	48 (100%)
	Female	0 (0.0%)	3 (14.3%)	4 (19%)	6 (28.6%)	8 (38.1%)	21 (100%)
Years of service	1-9	0 (0.0%)	4 (8.7%)	14 (30.4%)	10 (21.7%)	18 (39.1%)	46 (100%)
	10-19	0 (0.0%)	0 (0.0%)	3 (20%)	6 (40%)	6 (40%)	15 (100%)
	20-29	0 (0.0%)	0 (0.0%)	2 (33.3%)	4 (66.7%)	0 (0.0%)	6 (100%)
	30-39	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)	2 (100%)
Teaching qualifications	Diploma	0 (0.0%)	0 (0.0%)	3 (27.3%)	4 (36.4%)	4 (36.4%)	11 (100%)
	Bachelor Degree	0 (0.0%)	4 (7.4%)	15 (27.8%)	16 (29.6%)	19 (35.2%)	54 (100%)
	Master Degree	0 (0.0%)	0 (0.0%)	1 (25%)	1 (25%)	2 (50%)	4 (100%)

Appendix 18: Specific examples of initial coding process

Nature of interview	Data chunks	Initial coding
Focus Group	<p>R: Are you prepared to implement curricula changes? How does the level of preparation affect you?</p> <p><i>Kiongozi (FG1):</i> Although changes have been introduced in my teaching syllabus, I was not prepared to implement them. When the school inspectors came, I asked them for help in how I would teach the newly introduced reforms. They failed to explain or demonstrate how I would go about it. As a result, my students became victims because they were expected to deal with the subjects which even I was not conversant with, thus leading to massive failure in student achievement. This prompted me to feel unhappy in my career of choice</p> <p><i>Msaka (FG3):</i> Teaching entails doing subject exercises, practical activities and the like. However, when the Ministry of Education brought out curricula changes, it did not equip schools with laboratory chemicals and apparatus, and text books to accompany these changes. As a consequence, a room was created for everybody who could write text books which often did not reflect the dictates of the syllabi. Despite my recognising the shortcomings of the content of those books, I, at one time, used them in teaching because I did not have a better alternative to resort to. I'm sure that if my school had been funded enough through capitation grant, it would be able to create a suitable teaching and learning environment</p>	<p>Lack of in-service teacher education compromised their teaching effectiveness</p> <p>Lack of professional support</p> <p>Negative sentiments</p> <p>Inadequate of teaching and learning materials</p> <p>Production of poor quality books</p> <p>Financial resources</p>

Individual Interview	<p>R: To what extent has the increase of secondary schools affected teachers' ability to do their jobs?</p> <p><i>Mwavita (IT8):</i> The introduction of new schools has not increased proportionally with the availability of teachers. The rural schools were affected the most. One day I happened to meet with students who told me that since they started forms one to four, they had only three teachers. Because of this, the management and control of students became difficult. I think there was no need to have all these schools. What was needed was to improve the existing ones and then start introducing a few ones.</p> <p><i>Ngoma (IT12):</i> During the implementation of the expansion plan, my school registered students with low academic performance. It came to the point where students who could not read and write were enrolled. Teaching students with low academic capability was very discouraging for teachers because no matter what they did in their teaching to ensure they passed examinations, students never made it. However, the society did not notice this and when such students failed, it was the teacher who was blamed and labelled incompetent. They never considered the ability of students.</p>	<p>Shortage of teachers</p> <p>Challenges in overcoming a high enrolment rates</p> <p>Low-ability students</p> <p>Teachers were regarded as responsible for poor student performance</p>
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